



NORMAN J. COLMAN, EDITOR AND PUBLISHER,
97 Chestnut street, St. Louis, Mo.

A. GUNTER, PUBLISHER, 99 Third St.
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VALLEY FARMER,
97 Chestnut street, St. Louis, Mo.

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VALLEY FARMER,
99 Third street, Louisville, Ky.

FARM NOTES FOR MARCH.

This is a busy month for the farmer. The operations for seed planting are fairly begun. If Oats were not sown last month they should certainly be sown this month, and the earlier the better. The straw grows too rapidly, if the seed is sown late, and the crop will be an abundant yield of straw—which will probably lodge—and a small quantity and inferior quality of seed.

POTATOES should be planted this month, particularly by those raising them for market in the vicinity of cities. We plant our first crop in March, and generally get a good crop. The spring rains afford sufficient moisture, generally, for a good yield. We plant our second crop the latter part of June, depending upon the early fall rains to bring them out. Potatoes must have a good deal of moisture to yield well, and either early or late planting must be practiced to get good returns.

The soil for potatoes should be rich. New ground is preferable. No crop is more improv-

ed by good manuring. Potatoes should never be planted two years in succession on the same ground. The sub-soil plow is of very great advantage to the crop, and the increase in the yield when used will well pay the expense of using it. The ground should be got in the best possible condition; should be light and thoroughly pulverized. We plant in drills three feet apart—dropping the pieces about nine inches apart in the drill—covering pretty deeply with a one-horse plow. Just as the potatoe sprouts are beginning to show themselves, we go over the drills with an inverted harrow—the upper part of the teeth protruding about two inches. The ground is rendered smooth; the weeds are set back and destroyed, and the potato plants thus get the start of them; and, by good after culture, keep it. We cut our potatoes into three or four pieces or more, getting at least two good eyes in each piece. We have met with good success in cultivating this crop and give our method of cultivation.

PLOWING—A great deal of plowing will be done this month. Land should not be plowed under any consideration that is not in the proper condition. Land should not be plowed when it is wet or clammy. It should crumble freely. More crops are injured by working the soil when wet than one is aware of. Fields are so injured sometimes by plowing when wet that they don't get over the injury for years. The soil becomes lumpy, hard, baked, will not pulverize freely and plants cannot grow freely. Farmers, then, will consult their best interests by keeping their teams off their fields unless the ground is sufficiently dry. Many farmers have so much plowing to do that they think they cannot stop their teams after a heavy rain; but

they are practising a false economy by setting them to work.

FRUIT TREES should now be planted, and as early as practicable. Put out a good, young orchard. It will increase the value of your farm, and when it comes into bearing it will increase the amount of your happiness. What a blessed privilege it is to have an abundance of good fruit at all seasons! Be sure to plant for family enjoyment a couple dozen bushes of currants, gooseberries, raspberries, blackberries, &c. They will cost but little and cause the good lady of the house to wear a pleasant smile all the season. Now is the time to procure and plant all these. Send to some reliable, well known nursery immediately for these things, and plant them carefully, and they will reward you.

Harrowing lightly winter wheat and barley is a good plan. Many will doubt this, but if they will try it on a small portion of a field they will discover its beneficial results. Where the wheat has been somewhat heaved out by winter freezing, going over it with a heavy roller is a good plan.

The Stock should not be allowed to go out too early, especially on newly seeded pastures. Keep all stock from the meadow. If you have any well rotted manure and your meadow does not yield well, spread it over the surface. The manure will leave its mark.

Spring wheat and barley should be put in early this month.

The door-yard should not be forgotten. Assist in putting it in fine order; procure roses, flowering plants, evergreens, shade trees, and plant out in pleasant groups about the yard.

Clean out the cellar; remove all decaying vegetables; open the windows, and scatter lime over the cellar bottom, and you may save yourself and family a spell of sickness. A foul cellar is a most prolific cause of sickness.

CASSIA.

FIRE-PROOF WASH FOR SHINGLES.—The following simple application will no doubt prove of great value. We quote from the Albany Knickerbocker: "A wash composed of lime, salt and fine sand, or wood ashes, put on in the ordinary way of whitewashing, renders the roof fifty fold more safe against taking fire from falling cinders or otherwise, in cases of fire in the vicinity. It pays the expenses a hundred-fold in its preserving influence against the effect of the weather. The older and more weather-beaten the shingles, the more benefit derived. Such shingles generally become more or less warped, rough and cracked; the application of the wash, by wetting the upper surface, restores them at once to their original or first form,

thereby closing the space between the shingles; and the lime and sand, by filling up all the cracks and pores in the shingle itself, prevent it from warping for years, if not forever.

The Culture of Timothy and Clover.

The following Essay was read before the Farmers' Club, of Chester County, Penn., by Mr. John D. Evans. It is well worthy of being read by our Western readers:—

Timothy and clover, certainly embody more qualities advantageous to the farmer, than any of the other grasses; yet, of late, the uncertainty of their growth, the falling off in their productiveness, together with the necessity for having a more steady and uniform supply of green food during the grazing portion of the year, have instituted an inquiry and search for a substitute—thus far, without success, timothy and clover still remaining general favorites.

It is here proposed to prevent, by cultivation, at least in a degree, these failures, rather than substitute a new or foreign variety.

The first, and generally the greatest damage clover sustains, arises from the decrease of moisture in our climate, and high, dry winds that prevail towards the middle and end of spring. This damage can be obviated in a great measure by sowing the seed on freshly fallen snow, and this can be usually accomplished from the middle of February to the middle of March. The seed sinks into the ground, softened by the melting snow, and becomes completely covered with earth, thus not only preventing the seeds from sprouting during the first day or two of warm sun, to inevitably perish, but retarding the growth of the germs until the weather is more steadily warm; and when the rootlets do start, they are protected from the effects of dry winds and sun, so fatal to all exposed.

Besides the dangers attending clover in its early stages, it sometimes dies out during the second fall after sowing, particularly if it were well grown the first fall, and well matured before mowing; or after mowing, if the second crop be a heavy one and left untouched to go down and lay on the ground until late in the fall. Pasturing after the wheat comes off, if the clover is well grown, and also after mowing; and in the other case mowing early; will, it is believed, in both cases prevent any serious injury.

Clover is rarely injured by frost the first winter after sowing, owing, it is presumed, to the looseness of the surface of the soil, particularly if lime has been spread during the fall or winter following the wheat. The smallness of the root may

also contribute to some extent to save the young plant.

When the ground is wet or clayey, plowing it into six-step lands for the wheat, has a good effect; and if the additional precaution is taken to sow such land with a minimum quantity of eight quarts of clover seed, with seven quarts of timothy and one bushel of orchard grass per acre, small damage will result from frost.

Timothy is not liable to injury in its early stages of growth, and rarely fails, if sown immediately after the drill, or before the ground has settled after harrowing or being rained upon.

The objection to this grass, that its growth after mowing is too slow, and affords but little fall pasture, arises in a great measure from its being generally mown off too closely.—Fields left for seed, or from any other cause not so close to the ground as is usual, it will be found to be but little behind clover in yield for fall pasture, and will grow much later in the season.

Abundance of seed per acre is of more importance than is generally attributed to it. Failures have frequently resulted from sparse, but rarely or never from liberal sowing; and if but one precaution could be taken to secure good crops of timothy and clover, that one should be abundance of seed—one half bushel being the minimum quantity of grass seed per acre.

This opinion is irrespective of its direct fertilising effects on the soil, which opinion is evidently gaining advocates among agriculturists—probably forced on them by the increasing evidence, that even our best lands are not only losing an original capacity for growing many plants to a high state of perfection, but also a susceptibility to the action of our long used or common manures.

THE FARMER'S MOTTO.—Let the farmer's motto be, then, "Good farms, good seed, and good cultivation." Make farming a science in which your head as well as your hands are employed; let there be system and reason in all your operations; study to make your farms beautiful, and your lands lovely; entice, by kindness, the birds to visit and cheer your dwelling with their music; I would not associate with the man or boy that would wantonly kill the birds that cheerfully sing around our dwellings and our farms; he is fitted for treason and murder. Who does not, with the freshness of early morning, call up the memory of the garden of his infancy and childhood? The robin's nest in the old cherry tree, and the nest of young chirping birds in the currant bushes? The flowers planted by his mother, and matured by his sisters? In all our wanderings, the memory of childhood's birds and flowers are

associated with our mothers and sisters, and our early home. As you would have your children intelligent and happy, and their memory in after life of early home pleasant or repulsive, so make your farms and your children's home!

Interesting Letter from Cuba, Mo.

One of our subscribers sends us the following. It will be read with interest:—

The *Valley Farmer* makes us regular monthly visits, handsomely attired in citizen's dress, at once the representative and advocate of the good and the true, the useful and the beautiful in rural affairs, and is I assure you ever a specially welcome guest among us. We wish it all possible success in its worthy mission.

While it travels about from place to place doing what good it can, will it say a word for us in Cuba—a quiet little village upon the South-West Branch of the Pacific Railroad, ninety miles from your city, located upon the edge of one of those matchless little prairies, to be found nowhere else than in our favored State of Missouri.

"Agriculture, Horticulture and Rural Affairs" are gaining a decided advantage over other arts and sciences in our little community; and almost daily we are called to welcome some enterprising and intelligent "new comer" designing to embark in the business of general farming, stock and grain raising; or, perchance, in the nicer and more remunerative employment of fruit raising, as a special business, for your city markets.

Somewhere from eight to ten thousand trees of the finest varieties grown, of apples, pears, peaches, plums, cherries, quinces and apricots, as well as a corresponding quantity of small fruits, will have been set out during the past fall and coming spring in and near about Cuba—while the prospect is fair for still greater interest being taken in this branch another year.

Nowhere, I think, in the favored West, can we find a soil and climate more genial to the healthy growth of fruit trees, vines and plants, and the full and perfect development of the finer fruits, than along the line of the South-West Branch—the immediate vicinity of Cuba being especially favored in this respect.

All our beautiful little prairies, thickets and forests, whether upon hills, hill-sides, or in valleys, are abundantly fruitful in wild grape vines, crab-apples, thorns, plums, blackberries, raspberries, &c.; and of wild roses in their season there is no end. The finer cultivated fruits, so far as tried, prove very encouragingly successful. All kinds with scarcely an exception grow luxuriantly and fruit well.

Another advantage we possess is found in the accessibility of our location to the best markets of the West, by means of the Pacific Railway, whose Depot is near the heart of your city.

Then again our lands are all that are desirable for the vigorous and healthy development of trees and vines, besides being cheap. Full four-fifths of our territory is unoccupied, and nearly two-fifths of it yet Government land, at prices ranging from twelve and a half cents per acre to two dollars and a half per acre, according to its position and length of time in market. The Railroad Company have immense quantities of land which are offered at eight and ten dollars per acre, the greater part of which is on a par with the Government lands, and well adapted to fruit culture and vineyard purposes. Nowhere in the great West, we think, can those desirous of engaging in the nursery, fruit and vineyard business, find a greater combination of favorable circumstances than here along the South-West Branch.

To all persons seeking new homes, where they may themselves produce and enjoy the luxuries of nearly all the finer fruits in their seasons, we would respectfully suggest at least a prospective tour up the South-West Branch into the "Ozark Regions," before locating elsewhere. In further confirmation of the above views, we would respectfully refer all interested to the excellent Report of our eminent State Geologist, Prof. G. C. Swallow, of the State University.—No one will doubt the correctness of so good authority without personal investigation.

C. WILCOX.

[Written for the Valley Farmer.]

ROTATION OF CROPS.

In all our farming operations there is too little attention paid to this most important subject. Limiting the crops of the farm to one or two articles is absurd in itself and fatal in the end. A proper system of rotation has numerous advantages. It divides the labor of the farm more equally over the various seasons. It gives a greater variety of produce some portion of which is more likely to escape atmospheric or other extremes. The variety of produce affords better and more economical feed for the animals on the farm, and does not exhaust the soil of any one element as soon as when only one or two crops are raised year after year, and gives the opportunity of getting the land gradually manured, and to the greatest advantage.

It has occurred to our mind that this year would be a good one to begin a full system of

rotation, the unitary number of the year 1 (1861) would open the series of the rotations. The number of crops included in a perfect rotation will depend much upon the kind to be cultivated, the character and condition of the soil, and other considerations. Some adopt a four years' rotation, but we think five, six, or seven, better. This is particularly the case in opening a new place where a nearly determinate number of acres can be cleared each year. The first would be corn or potatoes—that followed by wheat, with clover and timothy or other grass seed, sown the second year—the third, hay—the fourth, pasture—fifth, roots, as carrots, beets, potatoes, parsnips, turnips,—sixth, oats or barley: to be continued by re-commencing the course.

Another advantage in this system is, that manure can be most effectively applied *directly* to some crops as carrots, beets, and parsnips; indirectly to others, as potatoes. One manure is better for one crop, as lime for wheat; well-rotted stable manure for pasture; compost for roots. Some crops do best with the manure solid—and some liquid (potatoes, grass.); and thus all the waste of the farm is effectively used, and at intervals, while the body or heart is kept up in the land without any extraordinary exertion.

Again, wheat gives the plowing in the fall, corn in the spring, hay lightens the labor of the plow, and pasture is indispensable. Potatoes, beets, carrots, and parsnips require their working for the most part after the corn is laid by, and turnips can be most successfully sown and worked when almost all the other work of the farm is done for the season. Any man is better paid with thirty acres in these six crops of five acres each, than in any two crops of fifteen acres each. This system keeps the land cleaner and freer from weeds, and gives time for underdraining or sub-soiling at easy intervals. The order and the proportions of the crops may be changed to suit the soil and circumstances; but the value of the system of rotation, cannot be assailed.

But we do not maintain as some do that rotation of crops prevents the necessity of manure, but conceive that in the end there is still a balance due the land for crops removed, the knowledge of which, would cause us to give this subject increased attention. The only valid objection that can be urged against the system proposed, is the expense of such large quantities of fencing as will be required by these numerous divisions. This objection is frequently obviated

in irregular land, particularly in the uplands of our State; but there are three methods of removing the difficulty, either, or two of which together, are valuable aids to profitable farming. The difficulty lies mainly in the pasture, which will be removed by the use of some form of portable fencing, which in the most favorable position of the ground might require only one side of the portable fence to be removed each year—and some portable fencing will be found invaluable in many of the requirements of the farm. A second mode, is *yarding* the cattle during the night and *herding* them during the day without any sub-dividing fence. The third mode, and it is a good one, is to *soil* the stock entirely; have good yards and cut the grass daily that is marked in the plan as pasture, and feed in the yard. This saves labor, feed and manure, and the stock is always at command; and it is certainly well adapted to rotational farming. We most unhesitatingly assert that the adoption of a correct system of rotation in the crops, will lighten the labor; give more efficiency and nutritive value to the crops; maintain stock in better condition; increase the yield of wheat and corn per acre; keep the soil in better condition and heart; and lies at the very foundation of profitable farming. "A little farm well tilled," will become a motto, and a man will not be regarded as a good citizen who robs the soil. He that robs the soil of its fertility robs the nation. He that can raise two blades of grass where only one grew before is a true public benefactor.

W. M.

RED CLOVER.

Clover, though sometimes classed among the grasses, and used for pasturage and made into hay, is not, strictly speaking, a grass, but belongs to the leguminous family of plants. It is, however, capable of being put to a greater variety of uses than the grasses; and, if we may except Timothy, it may be regarded as more valuable than any of them—yet it is not as extensively cultivated as it should be.

Besides affording excellent pasture, and when properly cured making the most nutritious hay, which both cattle and horses eat with great relish, it is of still greater value in restoring fertility to land. While we are restricted, from the character of our climate, to so few crops, and particularly those of an exhausting character, clover should never fail to come in once in the regular round, or rotation, on all lands upon which it will succeed.

Nothing affords so rich pasturage for dairy cows as the spring crop of clover; and for swine, and particularly sows and pigs, as well as store hogs it is the cheapest and best feed that can be furnished them.

Where the land is sufficiently strong as not to require the entire aftergrowth for its restoration, the fall cutting for seed may be turned to more profitable account than an equal area of wheat.

Clover also affords an excellent preparation for various farm crops; it is good to precede potatoes, corn or wheat, and will add sometimes fifty per cent. to the product of these crops. Besides the manure afforded by the crop when turned under, the long roots that decay in the soil all tend to keep it light and mellow, admitting air and moisture to the roots of the growing crops, that mark its value in every stage of their growth.

Many farmers have fallen out with clover, because, as they say, they had such poor luck with it. It is true our late spring frosts and early drouths sometimes prove destructive to young clover, but the bad luck complained of, in most cases, may be traced to bad management on the part of the farmer. A soil adapted to clover, if put in proper order and sown at the proper time, in nine cases out of ten will secure a "good stand." Half of the clover that is sown is lost by attempting to grow two full crops on the same land at once. It will require the best of management to secure a good set of clover when sown upon a full field of oats. The oats grow so rapidly, that, after they joint, the clover still small and delicate, is so over-shadowed that, with the dry weather frequently prevailing previous to harvest, much of it is killed out. If clover seed is to be sown with oats, a less quantity of the latter should be sown than if it was not to be accompanied with oats. It is almost useless to sow clover with oats unless the seed can be sown in proper season.

The season is governed by circumstances. The early part of March is generally the most proper period. If the weather is unfavorable it may be delayed until the tenth or fifteenth of April, but later than this renders the crop liable to be overtaken by hot, dry weather before the clover plants attain sufficient hold upon the soil to resist the effects.

Clover may also be sown upon wheat; when this is the case it should be sown before slight frosts have ceased to occur. The action of freezing and thawing tends to cover the seed sufficiently, and secure an early start. We,

however, prefer when sowing clover upon wheat to defer it until frosts are about over, and then harrow the wheat with a sharp, moderately heavy harrow, and then sow the clover seed immediately upon the fresh broken soil. The harrowing is very beneficial for the wheat, while it affords the best preparation to the clover.

Some farmers, who esteem clover highly, and who make the seed an important part of the crop, sow it alone, without wheat or oats. In a favorable season this gives a good growth of clover the first season.

In making clover hay, great care is required. It suffers much from rain, and will not admit of being so long exposed in the swath to the heat of the sun. To make the best clover hay it should only be allowed to wilt, and then be raked up and cured in the cock.

SUB-SOIL PLOWING.

We would like to tell our readers how important it is to use the sub-soil plow.—Spring is here, and soon seed will be put in the ground. The harvest will depend very much upon how well the ground is prepared for the seed. With proper preparation, the yield may be doubled. We have no hesitation in saying that, if the same amount of labor were bestowed upon half the ground cultivated which is now bestowed upon it all, a greater number of bushels of grain would be raised. We are not the advocate of small farms. We believe there is a field for enterprise in agriculture broad enough to suit any aspiring mind. At the same time we would recommend that what is done should be done well—in the best possible manner—and we know of nothing more needed or that would pay better in an increased yield than using the sub-soil plow for all the crops that are cultivated.

We suffer nearly every year from the effects of the drouth, which is scarcely felt on lands where the sub-soil plow has been used, but which blights and destroys nearly all crops, growing on land which has been broken in the common way. The roots can go down deep in search of moisture and food when the land is deeply broken—but burn up and perish when the ground is broken only a few inches.

Sub-soil plowing is as important in a wet season as in a dry one, for the rain can sink down deeper and not stand about the roots of plants “drowning them out,” as it does when only a few inches are disturbed.

If the season is neither very wet nor very dry, it is still advisable, as the particles of matter

are disturbed to a greater depth; there is a deeper bed of earth for the roots to feed upon; the plants have more plant food, and, consequently, must be stronger and yield a larger return of seed.

This is the season to procure your sub-soil plows if you have not got them. These are kept at all the agricultural implement stores.

[Written for the Valley Farmer.]

Plowing, and Plowing Matches.

We conceive that this is a proper time to urge upon the attention of the agricultural community the importance of plowing matches as a most valuable auxiliary in the vast field of agricultural improvement. The importance of the plow in all the operations of the husbandman is too obvious to require to be insisted on. It is the great indispensable; and, as such, proficiency in its management is as much to be desired as in the management of the sword, or the lancet, or the pen. To be completely master of any of these articles is cause for just pride, and our young men, and many of our old men, too, take great pride in their mastery of the gun, and feel that being a *good shot* is something to talk of.

Now, as success in cultivation depends, primarily, upon the plow, we conceive it ought to be placed in its proper position in the estimation of society. We know that it matters not what care and after culture we give a crop; if it is not well plowed, it is all in vain. With the cereals the plow does almost all the work, and with them there is no after culture to make up deficiencies; in fact, after culture is of little avail to any crop where the primary preparation with the plow has been imperfectly done.

Plowing is at present esteemed a mean, degrading operation, requiring neither taste, judgment nor training; and, consequently, we find that if a piece of iron is trailed sometimes through, sometimes over, the soil, at the rate of 2.40 time, so much plowing is supposed to have been done; and, as a result, in many of our fields, it is hard to tell the difference between plowing and scratching. But as improvements in husbandry obtain, as they will do, the handling of the plow will be held in proper estimation.

In plowing, we want a uniform breadth, depth, and inclination of the slice, with a straight, clean cut furrow. This requires a good, well adjusted plow; a strong, well trained team. The plowman must have the most perfect control of himself. The plow and the horses, must

work with ease and harmony. To effect all this, the man and horses must be familiar with each other. The feet, the hands, the back, the eye, the voice, and a large share of mechanical calculation are all at once brought into continued action; and this during the entire operation, in order to produce correct results—so that to be a thorough plowman is really something worthy of attainment.

Plowing matches would do much toward this training. They would foster an emulative spirit by direct competition; create a healthful tone of feeling in respect to manual labor in the community; afford opportunities of social intercourse in the neighborhood; call together the families of all the parties interested, and even mothers and daughters would grace these festive gatherings with smiles and looks of approbation—and we all know what an impetus is given to any operation in which the *fair face of woman* is an active element. Then we have the sage counsels and criticisms of the fathers in the field; the final verdict of the judges; the silver goblet that has been the object of the peaceful strife, which will be handed down the long path of life as a trophy of greater value than the blood-stained banner of the conqueror; and the day closes with the dinner, supper, or social gathering, where wit, mirth, instruction and beauty unite in giving zest to the plowing match and doing homage to the plow as the great instrument of the world's civilization.—The city has its numerous parades and processions, with their suppers and balls; but we ask if the plow is not as worthy of our esteem as the sword?

This subject is certainly worthy the attention of all associations connected with the culture of the soil, and we would take pleasure in recording the initiation of the *first Plowing Match in Missouri*; and the name of the successful competitor would be honorably handed down in the annals of THE GREAT FUTURE OF OUR STATE. Let this subject be viewed in the proper spirit, and taken hold of as it deserves. Let the mothers and daughters of our farmers take an interest in the movement, and we will find it become as essential to a township, as its common school system.

W. M.

A NEW GATE HINGE.—There is a new plan for fastening the upper hook or eye of a gate hinge into the post, which we have seen described lately, and like it so much that we wish all farmers to know it. Instead of driving the hook into the post, a hole is bored quite through it, just at the top of the upper rail of the fence,

and the shank is made to reach some inches beyond the post, and has several notches on its upper side. Bore a hole through the rail, and put a small bolt with a loop hole at one end, to fit in a notch of the hinge, and nut at the other. Of course, when screwed up, the sag of the gate cannot draw the hook; but, if necessary, it can be made shorter by shifting a notch or two.

TRY EXPERIMENTS.

Yes, readers, try experiments. Much may be learned by them. They will lead to improvement and to greater success. They who do not believe it will pay to under-drain, and denounce it as a humbug, should under-drain an acre or two that they may have their experience to sustain their views. If under-drained land produces no larger crops, other things being equal, than other land not drained, then under-draining should be denounced as a humbug and cheat. Some of the best farmers have tried under-draining and say the increased yield in two or three years pays for the expense of under-draining and ever after will reward them with double the crop it formerly produced. If you think they are mistaken or trying to deceive you, we say try the experiment.

Many think it does not pay to haul out manure on their lands, and never think of removing it. We know this from our own observation and from their declarations. We ask them to manure an acre or two this spring in some field where they are raising a crop, and see whether the acre manured does not produce a larger harvest. Next year probably the increased yield would be larger than that of this year. Let the doubtful try the experiment and then judge for themselves. If they will, we believe the manure of the farm will be more carefully saved and more highly prized hereafter.

Some may not believe it will pay to use the sub-soil plow. Such we ask to use it properly in one quarter or half of a field and see the results; if the crop is no larger or better—and especially if the season should be very dry or wet, they will get facts to confirm their doubts.

[Written for the Valley Farmer.]

HOW TO KILL GOPHERS.—Take a potato the size of a hen's egg, divide it into four parts; take each part and split it with a thin blade, so as to insert a small quantity of strychnine; press it together, and insert this piece of potato into the hole of the gopher. If you can find them at work and the hole open, close the hole after placing the potato in it; but if you should not find them at work, seek for the most re-

cently thrown up hillocks; take a spade and dig until you find the hole beneath, in which place the piece of potato charged with strychnine, and leave the hole open. It is the habit of the gopher, to open his hole if you close it, and to close it if you leave it open.

I have tried the above experiment with the greatest success; the remedy is cheap and simple, the smallest quantity of strychnine will be sufficient in each piece of potato.

It is hardly necessary to say that as strychnine is the most deadly of all poisons, it should not be placed in the hands of any, except the most cautious.

T. B. H.

[Written for the Valley Farmer.]

Osage County Agricultural and Mechanical Association.

EDS. VALLEY FARMER:—Permit me to say a few words through the columns of your valuable paper to the citizens and friends of improvement in our county, in reference to the organization and progress of the Agricultural and Mechanical Association of our county. This Society was chartered by the Legislature of Missouri in March, 1859, and was organized under the said charter on the fourteenth day of January, 1860.

A short time after the organization of the Society, the President and Board of Directors ordered suitable books to be made containing blank Certificates of Stock and Membership, together with books of receipts and for records, all gotten up in a neat but substantial manner, altogether costing the Society about fifty dollars.

The Society, at its organization, established the Capital Stock at six thousand dollars, and divided the same into three thousand shares, making two dollars a share; the Society at the same time, made Mr. J. K. Kidd, the President of the Association, their General Agent, authorizing him to proceed forthwith to the selling of Stock and Membership Certificates, upon which work he immediately entered; and at the last meeting of the Board of Directors he reported as having made sale of over two thousand shares of the Capital Stock, and also near ninety Certificates of Membership. A large number of shares, have, since the time of the General Agent's report to the Board, been sold by the Treasurer of the Association.

On the fourth and fifth days of last October, the Society held its first Fair. The Society had not made any preparation in the way of fair grounds and buildings, owing to the fact that they had not yet selected or purchased grounds whereon to build; the Society, therefore, made application to the proper officer for the privilege of using the Court House for the exhibition of all the smaller articles, which request was most readily and courteously granted; the stock and live animals of all kinds were shown in a place prepared on the public square. And, notwithstanding all the disadvantages under which the Society labored in consequence of not being better prepared, they were enabled to have an interesting Fair.

In addition to certain sums of money offered in the list of premiums published by order of the Board of Directors, they offered as a part of certain premiums a copy of the *Valley Farmer*, published in St. Louis, believing that the distribution of so valuable an Agricultural paper would greatly advance the interests and enterprise of the farmers and mechanics of our county. We have for a long time advocated the awarding of agricultural books and papers by societies of this kind, believing that there is more real good to be effected among the industrious working farmers and mechanics of the country in this way than any other.

The number of copies of the *Valley Farmer* awarded at our Fair was forty-two.

The annual meeting of the Association came off on the second day of this month; previous notice having been given, a large number of the members was present, to which was added quite a number of friends and spectators who were not members. There was a great deal of interest and good feeling manifested throughout the proceedings of the whole meeting. The officers being present, the President, Major J. K. Kidd, took the chair and called the meeting to order. It was then announced by the President that the election of officers was first in order, whereupon the following named gentlemen were elected to fill the different offices for the present year:

President, Hon. Z. Isbell. Vice-President, Hon. J. W. Blount. Board of Directors, Messrs. C. W. Holtschneider, J. C. Ferguson, F. Zelle, G. W. Vaughan and R. Cox. Recording Secretary, J. T. Berry. Corresponding Secretary, Dr. A. L. McGregor. Treasurer, D. Hopkins.

The President was then conducted to the chair, who after returning thanks to the Society for the confidence they had manifested by placing him in the first position of the Association, went on to address the meeting showing the great good likely to result to our county from the Society, if properly conducted. His remarks were very appropriate, and had a good effect, and he resumed his chair amid enthusiastic cheers from the entire audience. After order was restored, a resolution was offered that the Society return a vote of thanks to their former President, Major J. K. Kidd, in view of the untiring zeal and labor put forth by him in behalf of the Association; which resolution and vote of thanks were voted unanimously; after which Mr. Kidd returned his thanks to the members of the Association for this mark of respect.

On motion, the Society adjourned *sine die*.

We understand that the Board of Directors are to meet in a few days to select a place for the fair grounds.

D. H.

Linn, Osage Co., Mo., Jan. 8th, 1861.

AGRICULTURE IN SCHOOLS.—The "Union School" of Huntington, L. I., has adopted a plan that may be imitated to advantage by other schools. It is a juvenile agricultural society, which holds annual exhibitions, and awards prizes, as in other similar exhibitions by children of a larger growth. The premiums are confined to articles produced by the pupils, male

and female, but articles for exhibition are contributed by parents and friends, to make the fair more attractive. The prizes competed for, are composed of books, agricultural papers, tools, and small sums in cash, for the boys; and thimbles, scissors, needles, workbaskets, teaspoons, etc., for the girls. For the best loaf of Graham bread, a kneading bowl and rolling pin are offered. There is no doubt that such an addendum to a school may prove highly beneficial to the pupils, in a hygienic, moral and industrial point of view.—[Exchange.]

R. A. Alexander's Farm and Stock.

We have before spoken of the fine farm and stock of R. A. Alexander of Ky. No finer farm and no better stock can be found in the United States, if indeed, they can be found in Europe. Mr. Sanford Howard, of the *Boston Cultivator*, one of the best judges of stock in America, has lately visited Mr. Alexander's farm and the following is his account of the visit. He says:—

On my way from Lexington to this city, I visited Woodburn Farm, the residence of R. A. Alexander, Esq. It consists of 3,400 acres, and is worth a hundred dollars an acre. All of it may be said to be either under cultivation or in blue grass pasture; much of the latter, however, having considerable of the original growth of timber on it, thinned out to the extent required for the growth of grass. The propriety of leaving these trees on pasture ground may be questioned, so far as regards their effect on the grass. Mr. Alexander thinks that where the trees are not too thick, about as much bulk of grass is produced as would grow if the land was wholly cleared, though it is not so nutritious.—But these groves furnish nearly all the timber used on the farms, as material for fencing, fuel, and other purposes. Coal, however, which abounds on the Kentucky river, and in some other parts of the State, is much used for fuel. Hence the timber is constantly diminishing, and the farmers in a few years will have to make their fences of something else. In most places, stone can be had, and even now, handsome lines of wall are taking the place of the unsightly "worm" fence. It is limestone, generally easily quarried, lying mostly in strata of suitable thickness for wall-building.

Mr. Alexander's chief object is the breeding of superior domestic animals, and his broad, fertile acres constitute probably the most noted stock farm in the United States. He has 300 horses, 250 cattle, and 600 sheep. I don't know how many hogs he keeps. The general slaughter of them was going on while I was at the farm, 150 hogs, averaging 285 lbs. each, being put up for home consumption.

The breeding horses consist of two classes, racers and trotters. Among the former were several distinguished animals, at the head of which is the renowned Lexington, the fleetest four-mile runner in the country, having accomplished that distance in 7 minutes 19½ seconds. He has been for sometime totally blind, but in

other respects appears sound and healthy. The fame of this horse being in all the land, and even in other lands, I was induced to examine him closely. Looking at him wholly as a runner, I think I have never seen a horse whose conformation denoted greater ability. He is rather low in the withers, with middling length of back, long hind quarters, great length from the hip to the hock, and the muscles of the stifle running low down, short shanks, rather long, oblique and springy pasterns. His general appearance is indicative of high nervous energy. To the eye of the utilitarian, he is not as handsome as Mr. Richards' Fysal, or the Knight of St. George. In a stable near that of Lexington, Mr. A. has another horse—Ringgold—of considerable reputation as a runner, he having pushed Fashion (at Baltimore, if I remember rightly,) to one of her quickest races. Mr. A. has much young stock in training for the spring races. Many of them, so far as I could form an opinion from their shape, appear well. Particularly promising in respect to a combination of points of strength and speed, is a sorrel two-year-old filly, whose name I forgot to make a note of. Mr. A.'s celebrated Scythian, imported a few years since, was in Tennessee, where he has stood the past season, so I did not see him.

Mr. A.'s trotting stock has been obtained within a few years, but they now number upwards of sixty of all ages. His principal stallion is Edwin Forrest, a horse not unknown on the trotting course, bred near Utica, N.Y., and got by a horse called Bay Kentucky Hunter. He owns the dam of that little wonder, Flora Temple, and has succeeded in obtaining several foals from her by Ed. Forrest, some of which already show considerable speed in trotting, and one or two bear not a little resemblance to Flora. The old mare is said to be twenty-three, but is now in foal to Lexington, and bids fair to breed for some time to come. Among the horses of the trotting stud, are some of the descendants of a horse formerly well known in Rensselaer and Washington counties, N.Y., called Norman, or Morse's Gray. A grey five year old mare of this stock, is said to be able to trot in 2.40, and in respect to size, shape and general appearance, is every way a fine animal.

Mr. Alexander's cattle are mostly Short-horns. He has a few fine Ayrshires—the older of which he bred himself on his Airdrie estate in Scotland—and also a few of the Channel Islands or Alderney breed. These are kept for dairy purposes. Quite a demand has sprung up for the Alderneys, and Mr. A. contemplates making a somewhat large importation of them. I may here remark that Mr. A. has erected a fine dairy-house, with all the appliances of the modern European structures of this kind, and can show butter which will compare favorably with any in the country. Any surplus he has, finds a ready sale in Lexington and Frankfort, at twenty-five cents a pound. He is now erecting another dairy-house, on quite a large scale, on another part of the farm.

Mr. A.'s breeding Short-horns have been derived from the best in Britain, without regard to expense. His principal bulls are; Second

Duke of Athol, roan, nine years old, bred in England by Mr. Towneley; by Booth's Lord George, dam Duchess 54, by Second Cleveland Lad. He is a vigorous and well made animal. Duke of Airdrie, red and white, six years old, by Duke of Gloucester, dam by Second Duke of Oxford. Albion, white, four years old, by Grand Turk, dam Frances Fairfax. He is the heaviest Short-horn bull in proportion to bulk that I ever saw, and carries the most weight in the hind quarter. He is at the same time a remarkably even bull, with good quality of flesh. Though fine in all his points, he shows no want of vigor, and but for his color, which happens to be not in fashion, he could hardly fail to be highly valued for improving most Short-horn herds especially where there is a tendency to coarse frames. Second Duke of Airdrie, roan, four years old, by Duke of Airdrie; dam, Duchess of Athol, by Second Duke of Oxford. A strong and good bull. He has been the rival of Albion, and has obtained the preference of one or two committees over him; but as the keeper observed, in answer to my question, why the first prize was awarded to Second Duke of Airdrie—"Oh, sir, the judges were down on white." Clifton Duke, red, three years old, by Duke of Airdrie, out of Lady Bell, by Earl of Derby, grand-dam Forget-me-not, imported by Mr. A. He is, perhaps, the most valuable bull in the herd—of good size, fine head and limbs, large body, capacious chest, broad loins, with an excellent skin and coat. I have seen few Short-horn bulls that I esteemed more highly. This opinion was formed on his own merits, but when I came to see dam and grand-dam, it was greatly strengthened. His dam, Lady Bell, is one of the best Short-horn cows I have seen in this country; and his grand-dam, Forget-me-not, although showing some of the effects of age, is still a cow of great substance and fine symmetry.

Of course, I speak of this stock in reference to their fattening properties, for which the highest priced Short-horns are chiefly valued. True; there were among Mr. Alexander's dairy stock some Short-horn cows; but those which were pointed out as the best milkers, had generally the rough frames of the old Yorkshires, which contrast strikingly with the symmetrical and thick fleshed animals of the improved breed.

Mr. Alexander's sheep are Southdowns, or high grades of that breed. He has tried the long-wooled breeds, but prefers the Southdown. He has obtained some of the best of Jonas Webb's flock, as well as specimens from other noted flocks. Some of the best mutton which has of late years been in Boston market, has come from Kentucky, and with the attention now being given there to the best breeds of sheep for this purpose, they will be able to send us more of the same sort.

I intended to have spoken, in a former letter, of some fine stock which I saw on the farm of Mr. James K. Duke, near Georgetown, Ky. Mr. D. was the breeder of the celebrated mare Bonnie Lassie, and now has a horse—Bonnie Laddie—own brother to her. But I cannot now speak particularly of his stock.

In a late issue of the *Oregon Farmer* we find the following article, which we think well worthy of publication. The discussion between father and son it will be seen was about an editorial article which appeared in the *Valley Farmer*. We have many subscribers in Oregon, and hope our readers are all as appreciative as those referred to:—

An Evening's Reading.

Not long since we were in the country, and spent the night at the residence of a farmer.—Supper being ended, and the table cleared, a cloth was thrown on, and the boys and the father sat around, and read some of the publications of the day. An hour or so passed off in that manner, when the following colloquy followed:

Father—Well, Gordon, what have you been reading about?

Gordon—I have been reading an article in the (Missouri) *Valley Farmer* on the "IMPORTATION OF GRAIN INTO GREAT BRITAIN, AND AMERICAN MANUFACTURES." It has given me some new ideas in regard to the policy of nations, by which they endeavor to enrich their own people at the cost of others.

Father—Can you give me the leading points of the article you have been reading?

Gordon—I will try, and by looking at the article I can make myself understood. The article is based on a statement recently published on the imports of agricultural products, live stock, &c., into Great Britain for nine months, ending with September, 1859.

The importation of wheat and flour into England from all countries, is in quantity equal to 6,541,254 barrels of flour in 1859, while in the same period of nine months the previous year it amounted to 7,332,411 barrels. Of this large quantity, 7,257,411 barrels were furnished mostly by Russia and France, while the United States furnished but about 75,000 barrels, and in 1859 hardly 20,000 were imported from the United States. The wheat supplied by France to England during the last year was more than one-third of the whole amount bought, and of flour nearly 90 per cent. of the whole quantity imported. France with a dense population, cultivating an old soil, manages to supply this immense surplus to England. England being chiefly engaged in manufactures, it is impossible to raise from her own soil food sufficient to sustain her inhabitants, the deficiency being equal to \$8,000,000 per month, or over \$96,000,000 per year.

This immense sum, except the small proportion furnished by the United States, is paid for in cash, because the protective policy adopted by France, Russia and other countries of Europe, which furnish these provisions, exclude British manufactures, and receive only gold in payment—while the amount of the precious metals more than equal to this is annually paid by the United States to Great Britain for her manufactured goods. To meet the balance of trade against us last year we paid to that country for goods, the most of which might have been manufactured at home, a sum exceeding by \$30,000,000

the entire product for the same period of the gold mines of California. This large sum is chiefly paid for textile fabrics and iron, while we have the raw material for these goods at our own doors equal in quality to any in the world. Indeed, no inconsiderable portion of this sum is paid for fabrics, the raw material of which is the product of American soil, transported more than three thousand miles, and is manufactured and returned to us at our own expense. So that in fact the United States, with a virgin soil, capable of feeding the world, and with the raw material sufficient for the manufacture of every article needed for home consumption, pays to Great Britain a hundred millions of dollars annually, which she pays over to other nations for the food she consumes, while she is manufacturing goods for us.

Although we purchase largely from England, she buys nothing of us that she can obtain elsewhere. Her importations of Indian corn of late have greatly fallen off while her importations of cotton, which no other nation can furnish, have largely increased. Cotton, rice and tobacco are the chief articles which England receives of us, leaving an immense annual balance against us, which must be paid in gold. But for the discovery of the mines of California these large importations would long since have rendered the nation bankrupt.

A policy similar to that which exists between the United States and Great Britain, may be recognized as existing between the agricultural States of the South and West and the manufacturing States of the North and East. We furnish both the raw material for the Eastern manufacturer, and the food for the operatives, and buy their goods in return, paying transportations, commissions, &c.; while we possess unlimited motive power at a much cheaper rate at home, for all manufacturing purposes. The cost of the transportations of the cotton to the Eastern mills, the wheat, beef, &c., to feed the laborers, while they convert the cotton into cloth, and the profits and charges on the manufactured goods back to us again, would afford the Western manufacturer a handsome profit alone; to say nothing of the difference between the cost of motive power where coal may be had for a little more than the cost of digging. The true policy of the South and West is to manufacture their own cotton and wool, and to consume their own corn and beef at home.

All this statement I think is true, and another great truth seems to be inculcated by it. Oregon is young, labor is high, population sparse, and we cannot go extensively into manufactures. But we ought to manufacture articles of the first necessity. We ought to manufacture leather, woolen goods, furniture, wagons, plows, iron—we ought not to import a single article of food or necessity that we can manufacture or grow in Oregon. We have all the facilities for manufacturing except labor, and that we shall have in time. In the present condition of affairs, we must import from abroad; but my reading informs me that a purely agricultural country, was never a rich country. I have come to the conclusion, with the *Valley Farmer*,

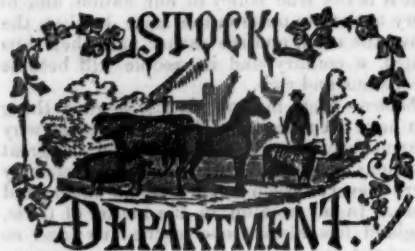
that it is the true policy of our nation, and of every nation, to unite in the same locality, the *flow, the loom, and the anvil*; and when thus united, a country and its people will become prosperous and rich.

Father.—Well, my son, that is a good thing you have been reading. There is no reason why a farmer's son should not understand the great questions of national policy, and in our country there is every reason why he should understand them. In my opinion, in the matter of trade, England has always overreached us; and so far as our own nation is concerned, we are more subservient to England and of more profit to her than her own colonies. Indeed, I have before me a speech made in the British parliament, not long since, in which this fact was distinctly avowed by a member of that body.—Let me read it. It is evidence in point:

"In a debate in the House of Commons, one of the speakers boldly argued, amidst repeated cries of 'hear! hear!' that it would be better for England that her North American Colonies should revolt and 'join the United States,' which would render them, he said, 'more profitable Colonies than they are at present.' This gentleman was Sir W. Molesworth, a distinguished member of Parliament. He went on to say that the United States of America are in a strict signification of the word still colonies of Great Britain, as Carthage was a colony of Tyre, etc. 'Now our colonies, as I will term them,' continued Sir William, 'our colonies of the United States are, in every point of view, more useful to us than all our other colonies put together.' He then went on to prove this by figures, winding up with the declaration that the vast, magnificent market of the United States only cost Great Britain £15,000 sterling a year. 'All our other colonial dominions' said the speaker, 'we govern at a cost of £4,000,000, while the United States cost us for consular and diplomatic services not more than £15,000 a year, [hear! hear!] and not one ship of war required to protect our trade.'"

ALPINE SUPERSTITIONS.—In some places the superstitions are still many. The crow and the woodpecker are evil omens; and witches have lost none of their power. *Thor* and *Woden* were evidently the gods of those who once inhabited the land; and remnants of the ancient mythology are still to be traced in the credulity of the ignorant. To sit upon a house where one is sick will bring death. Whoever meets a white chamois will die. The blossoming of the nightshade, the striking of the clock when the bells ring, are tokens of evil; but if one has money in his pocket when he first hears the cuckoo sing in the spring, he will have money all the year.—[*Cottages of the Alps*.]

HORSE CHOLERA IN TENNESSEE.—A disease called the horse cholera is prevailing in Bradley County, Tennessee, and the citizens have lost nearly a hundred head within the last three weeks by this fatal disease. Very few survive an attack of it. No remedy has been found for its cure yet. The hog cholera is also prevailing, and killing a large number of hogs.



[Written for the Valley Farmer.]

PROFIT OF MILCH COWS.

In the December number of the *Valley Farmer*, under the head of "Milch Cows," I stated that a good cow, properly treated and managed, would yield a net profit of fifty dollars a year. As the correctness of the statement is doubted by many farmers, I beg leave to submit the facts and figures in a few cases, that have been so well verified that I think they may be depended upon as true. I cannot probably take these facts from a better source than the State of New York, as Saint Louis and many other portions of Missouri—to our discredit be it said—are largely supplied with dairy products, butter especially, from that State.

In the volume of *Agricultural Transactions* of the State of New York for 1859, may be found the following statement of Hiram Olmstead, of Walton, Delaware County, N. Y.

"The whole number of cows milked, from which butter has been made the past season, has been, twelve from five to thirteen years old, and two three years old, and one two years old, making fifteen in all, old and young. The cows came in between the middle of March and the first of June, and are of native breed, except one grade Durham and three grade Devons. They have been wintered on hay and straw. No grain has been fed, but each cow has had about eight quarts of roots during that part of the winter that they were milked.

Butter sold in New York 2,728 lbs.,	\$602.38
Consumed in family, and remaining unsold 517 lbs. at 21 cts.,	108.57
Value of milk fed to hogs, after deducting other feed,	96.00
Value of milk fed to calves,	9.00
Thirteen calf skins at 87½ cts,	11.37

Total income, \$827.32

"Deduct for packages, salt, freight, cartage and commissions \$59.54, leaving net income \$767.78. Whole amount of butter made, 3,245 pounds.—Average to each cow, after deducting for heifers, 229 pounds. Net income from each cow, after deducting for heifers, \$54.19. The butter sold for a fraction over 22 cents per pound, being two cents less than the dairy has sold for in six or eight years. A deduction of one-third for

two year olds, and one-fourth for three year olds, is made in the statement above."

The statement was sworn to and subscribed before a Justice of the Peace, on the 31st day of December, 1859.

Edward Hoyt's statement in the same volume contains about the same items. His cows came in between the 10th and 26th of March. Wintered on hay with a few roots. After they came in they had a pint of corn and oatmeal each, per day, till grass; during the summer their feed was grass only. His average net proceeds from each cow was \$51.37; or if one-fourth be deducted for two heifers, the average would be \$56.04 to the cow. Sworn to also.

In the *Rural Register*, published at Baltimore, Md., I find the statement of Mr. John Shattuck, of Norwich, who received the prize of \$25, offered by the Chenango County Agricultural Society, "to any dairyman in the county who will produce the most in value, in proportion to the cows kept, not to be less than ten." Mr. S. gives a similar list of items to the one I have quoted, of Dr. and Cr., and shows a net product per cow of \$54.08, and says: "This average to the cow is without any allowance for milk or cream used in the family." The number of cows kept was twenty-five.

In the *Valley Farmer* for 1857, is published an account of the dairy, of Wm. White, of Cayuga Co., N. Y., which foots up as follows: From 14 cows, all native breed, and managed in the ordinary way, was sold 2,920 pounds of butter at 25 cents per pound, which amounts to \$730.—From the buttermilk, after deducting the value of the grain fed, pork enough was made to come to \$163; 14 calf skins \$8.75—total \$901.75, or an average of \$64.41 per cow.

Many more examples could be given of the profits of dairy farming, which would place the net products per cow at \$50, or over, per year, but it is presumed that enough has been given to put those who may still doubt, in the way of ascertaining further facts, should they take sufficient interest to do so. The manner in which the profits are chiefly made has been given, and also the figures from which the net proceeds are shown. It is true that in this showing, no account is given of the cost of keeping the cows, but among those Eastern dairymen, many consider the manure of the cows to be worth as much as their milk, and it is presumed that they all consider it equal in value to the cost of keeping the cows. Among some of our Western farmers who regard manure as a nuisance and sometimes haul it into the rivers to get it out of

the way, the case would be different, but such farmers generally consider themselves lucky if they make butter enough for their own use three-fourths of the year, and will not be likely to inquire into profits.

Among the agricultural improvements needed in the West, especially in our own State of Missouri, that in regard to the branch of farming under consideration, is one of the most important. There are, doubtless, some successful dairymen among us. If so, why will they not publish an account of their management and profits? It would be of great value to many of their brother farmers, and a means of adding materially to the general prosperity. It should and doubtless will be, a part of the efforts of our new Board of Agriculture, when organized, to ascertain, as far as possible the facts and statistics in regard to dairy farming, for promulgation. Let every one, then, who shall be engaged in the business to any extent during the present season, adopt some system by which he may know what his profits are. Let him do this for his own satisfaction and for the good of others.

It is believed that Missouri is as well adapted to dairy farming as any other country. Most of our soils will produce the grasses or other suitable food for cows as cheaply, luxuriantly, and richly, as the soil of any other State, while our climate is so mild that it does not require more than about one-fourth as much expense to winter stock here as it does in New York State. It is certainly bad policy, then, to continue to import so large an amount of dairy products as we do annually, when we have all the means of producing them profitably at home.

BUTTER MAKING.

To produce a prime article of butter is a very nice operation, requiring a degree of skill or expertness possessed by comparatively few, and yet the faculty may be readily obtained by most persons who will give the necessary care and attention to the subject. Among the requisites absolutely necessary to success in butter making, may be mentioned, first, an abundant supply in summer, of good sweet grass, or other fresh, sweet, green food. It must be remembered that the quantity and quality of the milk is dependant almost entirely upon the quantity and quality of the ingesta; or in other words upon what passes the cow's throat to her stomach. Hence the old Ayrshire adage, that "The cow gives milk by the mou'." If the cows are allowed to feed upon wild or rank her-

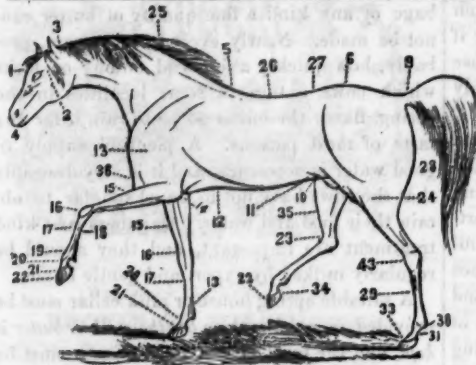
bage of any kind a fine quality of butter cannot be made. Nearly every one is aware, probably, how quickly a few wild onions or leeks which cows obtain in some localities in the spring, flavor the butter so as to ruin it for the taste of most persons. A plentiful supply of good water is necessary, and it is very desirable that the cows have not to travel too far to obtain their food and water. Quietness and kind treatment are important, and they should be regularly milked by expert and gentle hands.

A suitable spring house or milk cellar *must* be provided, in which nothing but the milk or butter is kept, and the most absolute cleanliness must be observed in and about the place and about every utensil employed in the dairy. Both milk and cream seem to have an absorbent nature, and are so exceedingly sensitive to the slightest taint in the air or in anything with which they come in contact, as to impart the unmistakable evidence of any negligence, to the taste, flavor, and keeping qualities of the butter. The extreme pains taken by most good dairywomen in cleansing, scouring, and scalding all the vessels used in the dairy, would be deemed extravagance by the novice.

Lastly, the making and treatment of butter cannot, generally, be intrusted to servants unless they are neat, cleanly and skillful. In Orange County, N. Y., where the famous butter of the New York market is made, the daughters of wealthy farmers go into the dairy and make the butter, because it cannot be intrusted to inexperienced and careless servants. Until ladies are willing to do dairy work with their own hands, they must generally be content to eat the heterogeneous, greasy compounds, too common under the name of butter, and unwholesome enough to cause dyspepsia, sallow countenance, unfair skin, &c. On the contrary, a fine quality of butter is one of the most delicate, exquisite, palatable and wholesome luxuries of the table.

L. D. MORSE.

INGENIOUS MODE OF TYING HORSES.—The Icelanders have a most curious custom, and a most effectual one, of preventing horses from straying, which I believe is entirely peculiar to this island. Two gentlemen, for instance, are riding together without attendants, and wishing to alight for the purpose of visiting some object at a distance from the road, they tie the head of one horse to the tail of another, and the head of this to the tail of the former. In this state it is utterly impossible that they can move on, either backward or forward, one pulling the one way and the other the other; and, therefore if disposed to move at all, it will be only in a circle, and even then there must be an agreement to turn their heads the same way.



POINTS OF THE HORSE.

As many of our young readers are already making their choice of favorite horses, but are unable to understand terms very common among the hostlers and jockeys, we have here introduced a small dictionary for their convenient reference.

1. The forehead. Few things more clearly indicate the blood of the horse than the forehead. In the blood-horse the forehead is broad and angular, gradually tapering from this point to the muzzle; while in the cart-horse the face is large, and the forehead narrow in comparison with that of the blood-horse.

2. The eye-pit. By the depth of the eye-pit we are enabled to form some idea of the age of the horse. At the posterior part of the eye a considerable quantity of fatty substance is deposited, which enables it to revolve in its orbit with facility and freedom; in old age, and in diseases attended with general loss of condition, much of this fatty substance disappears, the eye becomes sunken, and the pit above the eye deepens. To obviate this appearance, some of the lower class of horse-dealers puncture the skin, and, by means of a quill or tobacco pipe, blow into the orifice, and thus fill up the depression. This operation is called "puffing the glims," and may be easily detected by the application of pressure.

3. The poll.

4. The muzzle. The muzzle includes the lips, mouth, and nostrils. The darker the color of the muzzle, the more is the horse esteemed. The lips should be thin and firm; in old and sluggish horses they are usually loose and pendulous.

5. The withers. The speed and action of the horse is intimately connected with the length and height of the withers, and such a development is absolutely necessary in the hunter, the hackney, and the farmer's horse; but in the heavy cart-horse this rule may be reversed, as the more bulky and weighty he is before, the more advantageously will his powers be applied.

6. The croup. The croup, which extends from the loins to the setting on of the tail, should be long, and but slightly rounded.

9. The hock.

10. The sheath.

11. The flank. The space contained between the ribs and haunches is called the flank; when too extensive, it is an indication of weakness. The flank is usually referred to as indicating the state of respiration; during fever and chronic diseases of the lungs, it rises and falls with a rapidity greater than under ordinary circumstances.

12. The girth or bricket.

13. The shoulder. A muscular and slanting shoulder is indispensable where action and speed are required; but an upright shoulder may be preferable for horses exclusively destined for the collar.

14. The elbow. Good judges prefer a deep elbow, as it is always connected with increased power of action.

15. 15. The arms. It is universally agreed that the arms should be long, large, and muscular; if they are flat on the sides, and narrow in front as they approximate the shoulders, and deficient in muscle, they are radically defective, and the horse should of course be rejected.

16. The knee. The knee should be broad, as offering more space for the attachment of muscles; breadth in this part being an indication of strength.

17. 20. The cannon or shank. The cannon should appear wide when viewed laterally, and thin in front, as any addition besides bone and tendon must arise from disease or useless cellular matter.

18. Back sinews. The back sinews should be large, firm, and distinctly felt from the knee to the fetlock. If there be any thickness of cellular matter around them, it indicates previous injury, as a rupture of the ligamentous fibers; and as this thickening may limit the motion of the tendon, and predispose the part to a recurrence of lameness and inflammation, such a horse, although perfectly free from lameness at the time of examination, should be regarded with suspicion, and rejected as unsound.

19. 30. The fetlock joint. It is usual to apply the term fetlock to the joint itself; and the space between the fetlock and the foot, the pastern; but properly speaking, the fetlock, or footlock, is only the posterior part of the joint, from whence grows a lock or portion of hair.

20. 31. The Pasterns. The pasterns should neither be too long nor too short; if too short, they are non-elastic, and such horses are uneasy goers, and unsafe to ride; on the contrary, if they are too long, they are frequently too oblique, and although, from their elasticity, the motion of the horse may be pleasant to the rider, yet an increased length of limb is an indication of weakness.

21. 32. The coffin joint.

22. 33. The hoof.

23. The hock. The hock is the most important and complicated joint of the whole animal; like the knee, it should be hard and extended.—An enlarged hock constitutes unsoundness.

24. The haunch.

25. The neck. A moderate and elegant curve of the neck adds greatly to the beauty of the horse. The neck is sometimes recurved and

hollow; a horse with such a conformation is called ewe-necked.

26. The back. The comparative advantage of a long or short back depends entirely on the use for which the horse is intended. For general purposes (says Youatt) a horse with a short carcass is very properly preferred. He will possess health and strength, for horses of this kind are proverbially strong. He will have sufficient ease not to fatigue the rider, and speed for every ordinary purpose. Length of back will always be desirable when there is more than usual substance, and particularly when the loins are wide, and the muscles of the loins large and swelling. The requisites—strength and speed, would then probably be united. The back should be depressed a little immediately behind the withers, and then continue in almost straight line to the loins. This is the form most consistent with beauty and strength. Some horses have a considerable hollow behind the withers; these are called *saddle-backed*; a few have the curve outward, and are called *roached-backed*. This is a very serious defect, altogether incompatible with beauty, and materially diminishing the usefulness of the animal.

27. The loins can scarcely be too broad and muscular; the strength of the back and hinder extremities hinge upon this point. At the union of the back with the loins, a slight depression is sometimes observable; this must always be regarded as an indication of weakness.

28. The hind quarter.

35. The inside of the thigh or stifle.

38. The point of the shoulder.—[*Cincinnati*.

SWINE—FAIRS, &c.

EDS. VALLEY FARMER:—I read everything I see in Agricultural papers about hogs. Agricola writes a very good article on the hog interest in the Western country. I hope many will read it and profit by it. I refer to his article in the *Valley Farmer* in the December No. He says he has had considerable experience in breeding swine.

I have tried ever since 1834 everything having claims to superiority and beg the liberty to differ with him as to the best breed, and it is by discussing our differences honorably that we arrive at facts. I have tried the Chester Whites, procured them from Pennsylvania at great expense, and am bound to give the preference to the Berkshire. They are hardy, prolific, and fatten at any age. In short, they will pay better for what they consume than any other hog I have bred. I am so well satisfied of the fact, that I will exhibit next fall a lot of thoroughbred Berkshires of sufficient number and of different ages to test the value of the stock, against the same number, any one having the liberty to take them from all the swine family, so he takes no cross of Berkshire. If he beats

me, I will buy some of his stock, and it will be a profitable job for him.

I expect you will agree with me when I tell you that I know more about hogs than I do about writing; but I wish to make a few suggestions about the premiums offered for different things. They will offer premiums on a horse large enough to justify taking him from one end of the Union to the other. He takes the prize and returns home without benefitting any one but the owner. Now if they would offer premiums on hogs and other things that would be left among us, we should be profited. I hope as the time is at hand when the Societies will be making arrangements for their Fairs, that they will offer premiums that will result in the greatest good to the community.

I am one of the few that first organized the Agricultural Society in Sangamon Co., Ill., in 1833 or '4. Then we managed it differently and more to my liking. Then we suffered no horse racing, no side-shows of a demoralizing character. Our Fairs are becoming very unpopular with a great many good men. I hope these suggestions will cause all hands to take hold of the matter. JOHN C. CROWDER,

Sangamon Co., Ills.

Scours—Treatment in Young Colts.

EDS. VALLEY FARMER: Colts frequently take the scours when quite young, and if they are not relieved, a few hours will sometimes carry them off. This complaint may be induced in different ways and may be traced to different causes. Exposure in bad weather, getting into deep and cold water, or anything of a like nature, may cause a colt to take cold; and it will often manifest itself by running off at the bowels. A mare may be over-heated, and if her colt is allowed to suck before she cools, it may be affected immediately. Too great a flow of milk at first sometimes causes the colt to scour, and it is not unfrequently the case that there is something in the nature of the milk that is too relaxing.

There are many preparations that are effectual and good. I do not propose any new remedy; but the point to which I wish to direct attention is the fact, that if the cause is in the milk (except in cases of over-heating), the mare must be doctored instead of the colt. It would be just as well to pour cold water on a stump as to drench the colt when it is the (too great) laxative properties of the milk that is causing the trouble. This I have learned from experience. I once drenched a colt three times a day for

near two weeks (the longest time I ever knew one to be bad and yet recover) with almost everything I could think of, or my neighbors recommend, and finally the idea occurred to me that I might effect more by giving the mare something. Accordingly I cut up a feed of oats, mixed it with ship stuff, and wet it with a decoction of white oak bark, boiled down very strong. One feed effectually cured the colt.— Since that I have found no difficulty; adopting this course when the milk was the occasion of the trouble, or drenching the colt a few times if it had taken cold or sucked when the mare was too hot.

It is better not to check the bowels too suddenly.

I might take occasion to say in this connec-

tion that the use of white oak ooze is sometimes quite beneficial when fattening a horse. It is proper in order to succeed in this particular to keep the bowels *rather open*, but in case they become *too loose* by the use of a good deal of wheat, bran, or very rich grass, it is a material advantage to mix a feed of oats occasionally with the ooze prepared from oak bark. H.

"WORMS IN HORSES."—A correspondent of the *Southern Cultivator* gives what he calls an infallible remedy: "Give the horse for six nights in succession, in his oats or grits, a large spoonful of ashes from fresh burnt cobs or hickory; at the end of the six nights, give him for ten days or a fortnight, a large spoonful of poplar bark, (pounded fine,) in his food. The bark is from the poplar found in swamps. The bark must be dried before the fire in order to be pounded fine."



Description and Pedigree of Banner Chief.

Banner Chief was foaled on the 5th March, 1856; is a dark brown, sixteen and a half hands high; weight about thirteen hundred. Was sired by Jas. B. Clay's Membrino Chief; dam by Bay Messenger (the sire of Jim Porter); her dam by Hunt's old Brown Highlander. Clay's Membrino Chief was sired by Membrino Paymaster; he by Membrino, and he by imported Messenger. Dam of Membrino Chief, a Messenger mare. Banner Chief trotted one mile, the fall after he was three years old, in three minutes, sixteen seconds, without being trained. Owned by T. T. January, of St. Louis County, Mo.



HORTICULTURAL.

PLANTING AND TRAINING GRAPE VINES.

There are but few town and city yards where one or more grape vines may not be grown, yielding annually from fifty to hundreds of pounds of delicious fruit, besides affording a grateful and cooling shade upon the most exposed sides of the house; and in the country, where land is abundant, there are few fruits that can be cultivated to greater profit, provided the planting and training be done with the proper degree of skill and intelligence.

To grow the vine successfully, more care and attention are required than for any other kinds of fruit cultivated among us, yet there is nothing difficult or hard to be understood. In almost every agricultural periodical published in the country, besides in numerous standard works, ample directions, clearly illustrated, have been given for the management of the grape vine; and yet it is painful to witness the almost universal failure on the part of those who attempt to grow the vine on a small scale, whether in town or country. An apple or pear tree, if planted in moderately rich soil, will often grow and finally yield abundant crops with but little care and attention; but to grow the grape successfully, besides having a well prepared border for the roots to feed in, a certain system of training must be carried out in order to insure good crops of the best quality of fruit.

We are induced to take up this subject from some facts that have been forced upon our observation within a year or two—facts which illustrate the general want of knowledge on this subject throughout the country. In the fall of 1859 we made up quite an order for various kinds of grapes for a number of friends, including some for our own planting. Each individual planted his own according to his ideas of the requisite mode. At the close of the season we saw most of these vines, and out of the whole

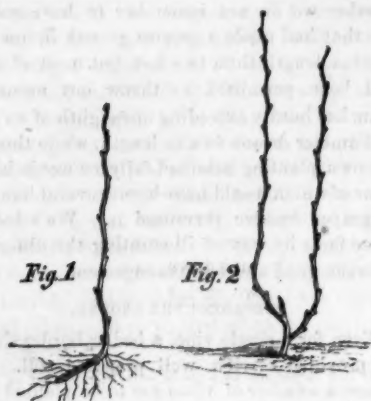
number we do not remember to have noticed one that had made a greater growth in one continuous length than two feet, but most of them had been permitted to throw out numerous branches hardly exceeding one-eighth of an inch in diameter or one foot in length, while those of our own planting attained fully ten feet in height, some of which would have borne several bunches of grapes had we permitted it. We allude to these facts by way of illustrating the difference between good and bad management.

PREPARING THE GROUND.

Even for a single vine, a bed or border should be provided of rich, well prepared soil. But where a number of vines are to be planted with the view to train them to a trellis, a well drained border of not less than ten feet wide and eighteen inches deep should be prepared; and a width of fifteen feet and three feet in depth would well pay for the extra labor required. In preparing the border the ground should be regularly trenched, and as we have said not less than eighteen inches deep. This is done by opening a trench say two feet wide to the depth designed, and this is filled with the soil taken from the next trench, usually putting the surface soil at the bottom. If the sub-soil is poor, a portion of it should be thrown out and carted away and its place filled with good, rich soil composed of decayed turf, well-rotted stable manure, bones, &c. so that the entire depth trenched shall be filled with soil sufficiently rich to grow any garden crop. We have observed that many persons who have undertaken trenching for vines, &c. have merely inverted the earth and soil, placing the surface soil at the bottom of the trench and the sub-soil upon top, and planted their vines in this. But little is gained by trenching in this way. Unless the surface soil is also made rich, and even to the bottom of the trench, it will be labor lost. The whole trenching for a row of vines need not be done at the same time. Three years may be taken to accomplish it. Begin with four feet in the centre, where the vines are to be planted—preparing two feet on each side the following season; and finish the work in this way where time and material can not be commanded to complete the job at once.

PLANTING THE VINES.

The best vines are usually propagated from layers. These, if well grown, are best when but of one season's growth. Vines propagated from single eyes or from cuttings do not make so strong a growth, yet these are mostly planted at one year old.



Our illustration, *Fig. 1*, if cut off just above the third eye represents a well grown layer. In planting (we assume that the border has been well prepared, and the compost fine and thoroughly mixed and well settled,) a hole is to be dug sufficiently wide to receive the roots well spread out in their natural position, and ten or twelve inches deep. In the centre of this hole raise a mound, or cone, up to within three inches of the surface. Place the plant upon the top of this cone, so that the upper roots shall be from two to three inches below the surface, then divide and spread out the longest lower roots over the top of the mound, and slightly cover with soil; and then divide another tier of roots, and cover in the same way, so that no two roots shall come in contact with each other; then fill to the surface, and gently tread the earth down, beginning at the outside of the hole and finishing towards the vine.

TREATMENT THE FIRST SEASON.

Even if vines have been well planted, here, almost universally, begins the first great error, in the total neglect of training. Instead of cutting back the vine to three eyes, all that chance to be on the plant are permitted to grow, producing by fall a mass of small, weak, unripe shoots, instead of one good, strong, well-matured shoot, as would have been the case had all of the power of the vine been concentrated into a single channel.

We have said the vine should be cut down to three eyes or buds although but one shoot should be permitted to grow the first season, yet it would not be safe to cut the vine down to a single eye, lest by accident that one should be destroyed. But if all three start and grow, when they are three inches long the weakest one may be rubbed off, and, after a few days, if no

accident occurs to the others the next weakest one may be removed. The second or middle bud generally, is the strongest and the one most desirable to preserve to form the vine. The subsequent care through the season consists in keeping the ground clean and mellow about the vines, in tying the vine to a suitable stake, say every eight or twelve inches, and in pinching off all the lateral shoots, that is, the branches that spring out at the foot of every leaf on the main stem. As soon as these have formed three leaves, two of them should be removed. After a few weeks they will push again; these should also be pinched off in the same way, removing two leaves and leaving one. By leaving a single leaf no injury is done to the vine, or the buds immediately at the base of these young shoots.

In a good season, under this mode of treatment, the vine may be made to reach the height of ten or twelve feet, of strong, well matured wood, when it will present something of the appearance of *Fig. 1*, on an extended scale.

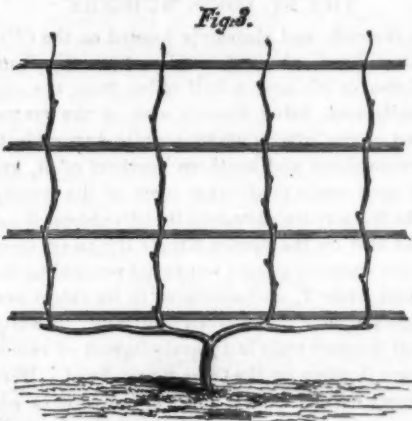
If from any cause, the vine does not make a strong growth, of at least eight or ten feet the first season, it must be cut back in the fall to three eyes, as in the case of the layer at the time of planting, and the subsequent treatment must be the same as that of the first season; and this course must be repeated until the vine does gain the proper size and strength, if it requires a second and a third year, at the end of which period the vine will be considered as one of only a single season's growth. At the beginning of fall it is well to check the growth of the vine by pinching off the end of the main shoot, in order to promote the ripening of the wood. If the weather be warm and wet, in the course of two weeks it will be well to repeat this operation by checking the new shoot that will put forth.

SECOND YEAR.

The single strong shoot made the first year should be cut down during fall or winter to four buds, only two of which should be allowed, finally, to grow, the others being rubbed off. These two shoots should be tied to stakes and the laterals pinched out as directed during the first season. If the vine starts strong and vigorously, one, and not to exceed two, bunches of grapes may be permitted to grow; all the other fruit buds should be removed. The autumnal shortening of the main stems should be attended to as in the previous season. At the end of the second season the vine will present an appearance similar to *Fig. 2*.

THIRD YEAR.

The two shoots made during the second year are ready to be extended in a horizontal manner and secured to the newly erected trellis. This should not be done later than February. These branches are now termed *arms*, and are to be cut back at the same time so as to leave two good buds or eyes on each arm, so that the upright shoots shall be eight or ten inches apart, any intermediate buds must be rubbed off. The four shoots that are permitted to spring from the arms must be trained to the trellis as in *Fig. 3*.



The summer and fall treatment must be the same as in the previous seasons.

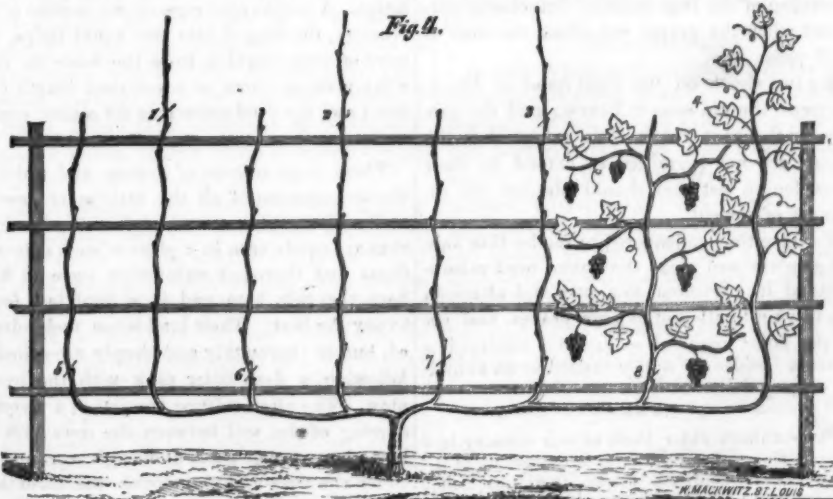
FOURTH YEAR.

The two middle shoots or canes are suffered

to remain in their position on the trellis, only they should be shortened to three or four feet in height at the time of the winter pruning. At this time, also, the two outside shoots should be secured in the horizontal line, extending the arms, leaving two good eyes on each at the distance of eight or ten inches apart, shortening the arms just beyond the last bud designed to grow. This will add two additional uprights, and two to be laid down, extending the arms as before. The two uprights remaining upon the trellis this season, may be permitted to mature each, two or three bunches of fruit, all other bunches should be removed at the time of blossoming. We will remark here that the future health and productiveness of the vine depend much upon care in not allowing the vine to over-bear. Most persons are reluctant to remove the germ of a single fruit; but if the number is not reduced within the capacity of the vine to mature, and at the same time admit of a vigorous growth of wood, serious loss will be sustained; besides the fruit of an over-taxed vine is of but little value. This precaution must never be forgotten at any stage of the growth of the vine.

FIFTH YEAR.

At the time of the winter pruning for the fifth year, the two outside uprights are to be extended in the horizontal line of the arms as before, and the uprights shortened to the proper length, and this is to be repeated until the vine presents the appearance of *Fig. 4*.



There are various modes of training grape vines, but the general principle is the same. It must be borne in mind that the fruit spurs only put out from canes of the last season's growth; hence a system must be adopted which will keep up an annual supply of new canes.

In field culture, where the vines are trained to stakes, provision is always made for a new growth of canes for bearing wood for the next season, while those of the previous season's growth are maturing their fruit: these being cut down to the last bud or eye at the winter pruning, giving place to new shoots for the succeeding year, and so on. In garden culture, where the trellis is generally employed, the same plan is carried out, only the renewal of the fruit-bearing canes is made from the horizontal arms. After the uprights have matured their crop of fruit, they are cut down to the lowest bud, at the winter pruning as at 5, 6, 7 and 8, *Fig. 4*. From these eyes new canes spring producing bearing wood for the following year, and the alternate canes that have just matured their crop are cut off in like manner; thus renewing one-half of the wood each year, while the other half is maturing its crop. The new shoots are also to be cut back to the top of the trellis as indicated at the cross marks 1, 2, 3 and 4.

SUMMER PRUNING.

The summer pruning consists in removing all surplus branches, and pinching off the little side shoots as we have before indicated, leaving a single leaf at each pinching, and in shortening the laterals upon which the fruit is borne. These should be cut back leaving *four or five* leaves outside of the last bunch of grapes. The German vine dressers of the West, many of them, leave but one or two, a number entirely inadequate to the maturity of the fruit. This shortening of the fruit bearing branches is performed when the grapes are about the size of small peas.

The two shoots on the right hand of *Fig. 4*, represent the old cane in bearing and the new cane for the next year's fruit, except that the laterals are not permitted to extend to their proper length lest they should obscure the remainder of the cut.

We have thus endeavored to render this subject so plain and clear that none need misunderstand it. Without this care and attention it is in vain to attempt to grow grapes, and yet all the labor required should be esteemed a pleasure besides an ample reward in an abundant crop of delicious fruit.

The common elder bush of our country is a great safe-guard against the devastations of insects. If any one will notice, it will be found that insects never touch the elder. The leaves of the elder, scattered over cabbages, cucumbers, squashes, and other plants subject to the ravages of insects, effectually shield them.

FIRST PREMIUM TO THE SAINT LOUIS NURSERY.

Report of the Committee on Nurseries.

To the St. Louis Agricultural and Mechanical Association:—Your committee, to whom was assigned the duty of awarding the premium for the *Best Nursery of Fruit and Ornamental Trees in St. Louis County*, take pleasure in making said award to Messrs. CAREW SANDERS & Co., of the St. Louis Nursery, and in doing so, submit the following brief report in regard to it:

THE ST. LOUIS NURSERY

Is centrally and pleasantly located on the Olive Street Road, about five miles from the Court House, or two and a half miles from the city limits, and, being directly west of the central part of the city, is about equally accessible to the northern and southern portions of it, and by good roads to all other parts of the county. The Nursery tract fronts on the Olive Street Road, and also on the Second King's Highway, forming a shape of ground somewhat resembling the block letter T, and embraces in its extent over eighty acres of rich and beautiful land. The original Nursery tract is a parallelogram of twenty acres fronting on the Olive Street Road. Here, snugly nestled amid a grove of native oaks and groups of fine evergreens, is the neat and tasteful cottage residence of one of the proprietors. Here, also, are situated the offices, greenhouses, packing sheds, &c. This piece is surrounded by a young, thrifty and well kept Osage Orange hedge. A wagon road runs up the middle of the Nursery, dividing it into two equal strips, the rows of trees running from the fence on each side; making them of convenient length (300 feet,) and the road answering for a turn row as well as road.

There is an amount of system and order in the arrangement of all the articles of growth, and a thoroughness and perfection of culture that are rarely seen in a place of such extent.—Good and thorough cultivation seem to have been the rule here, and it is doubtless found to pay the best. Their land is not under-drained, but is thoroughly and deeply sub-soiled by following a deep tiller plow with the trench plow. The after culture consists of a frequent stirring of the soil between the rows with the horse hoe, shovel plow, and cultivator, and between the trees and plants with the hand hoe.

It should be remembered that this Nursery is yet young—not over four years established—a fact which your Committee have taken into con-

sideration in making this award. The present saleable stock consists of a large, varied and fine assortment of all the leading varieties of Fruit and Ornamental Trees, Greenhouse Plants, &c., among which may be mentioned a large patch of two and three year old Apple Trees of the most thrifty and healthy growth, and of varieties known to be best adapted to our region of country. These are stocky, healthy trees, with moderately low heads, straight and handsome stems, and finely adapted for orchard planting. Their stock of Peach Trees covers two large squares, embracing many thousand trees, and they are of the finest possible growth, with a well selected list of varieties. In short, this part of the Nursery, with their varied and beautiful stock, is all that could be desired, and well worthy the patronage of the farmers and planters of our county and State. Those who have been swindled by Eastern tree peddlers, and been disappointed in their expectations in orchard culture by buying foreign trees and unsuitable varieties, may buy here with confidence and an assurance of better success.

THE SMALL FRUITS.

In this department, the St. Louis Nursery excels, the proprietors having given early attention to it, and spared no pains nor expense in procuring and testing the new varieties, fully appreciating the importance of having varieties adapted to our soil and climate. They have already been able to fix upon some varieties that succeed and prove valuable here, and to prove the worthlessness of others. They have in store a fine treat to the lovers of choice fruits and amateur horticulturists in St. Louis and vicinity in the large collection of varieties of strawberries, which will be in bearing next year, embracing forty or more varieties. Wilson's Albany, Jenny Lind, Triomphe De Gand, Trollope's Victoria, River's Eliza, Downer's Prolific and many others, foreign and native.

Of Raspberries they have about twenty varieties in cultivation, and think they are enabled to say which of them are likely to prove worthy of cultivation and which are not. The celebrated Catawissa and Brinkle's Orange have fruited here in perfection for the past three years, the former especially, proving to be a valuable acquisition. The Kirtland also has proved a hardy, productive and valuable variety, while the Antwerp, for their tenderness and lack of productiveness, they deem unworthy of further cultivation.

The Lawton or New Rochelle Blackberry has been quite extensively cultivated here and has fruited to perfection. The Dorchester,

Newman's Thornless, the Albion and others are on trial.

The Gooseberry, they cultivate largely for market, using for this purpose only the Houghton's Seedling, which is almost the only variety that can be relied on as free from mildew. The large patches of these thorny bushes in a perfect state of health, well furnished with wood, and full of fruit buds, giving promise of a bountiful crop next season, was a fine sight to behold.

The Currant, the proprietors think, does not flourish as well this far South, and is not as good and sure a crop as the preceding. The varieties are all to be found here, nevertheless.

THE ORNAMENTAL DEPARTMENT.

With an eye to the rapidly growing taste and the future wants of the greatest city in the West, the proprietors have laid the foundation for the finest and most *recherche* assortment of Ornamental Trees, Shrubs, Evergreens, etc., that is to be found anywhere in the State. Already their collection of the various kinds is extensive and excellent. They say they are adding yearly and are determined to keep adding by importation, by collecting hardy native sorts, by raising from seed and otherwise, until this department for richness and extent, for variety and beauty, shall be second to none in the country, to which amateurs throughout the West may resort as a place where they can see and obtain everything that is new and valuable in the horticultural line. They have now on hand a fine lot of Norway Spruce, Scotch and Austrian Pines, Arbor Vitæ, etc., with Maples, Elms, Ash, and a host of fine things in the shade tree and shrub line.

THE GREENHOUSES.

In this department also there seems to be a disposition to excel, so as to make the St. Louis Nursery as one of the Committee remarked, *The Nursery of the West*. The Greenhouses are four in number: First, a well arranged and excellent propagating house, 30 feet by 12, span roof, fitted up with propagating bed in the center, heated by hot water and pipes, and well adapted to the purpose for which it is designed; next to this is a fine Show-house, span roof, 50 feet long by 14 feet wide, fitted up with tables, shelves, and all necessary conveniences for blooming plants. Both these houses are new. The others consist of a range of houses 80 feet long with fixed roof and partition in the middle. The one is mainly intended for a Pelargonium, and the other for a Rose-house, and are very well adapted for the purposes.

In conclusion, we would say, that we have

witnessed with pride and pleasure the growth and progress of a Nursery so complete and well managed West of the great Father of Waters. We believe that it is destined to be an ornament and honor to our county and the State.

L. D. MORSE,
JONATHAN JONES, } Committee.
WALTER H. DORSETT, }

[Written for the Valley Farmer.]

Monthly Notes for the Garden and Orchard.

BY CAREW SANDERS.

The dryest and warmest spot having been selected for the kitchen garden, and these qualifications having been a little enhanced by artificial aid, the farmer, with his sons or other help, can afford to devote a few days to the garden before the work of the farm fairly commences, or before the fields are dry enough for the plow. The frost will be out of the borders of a sheltered garden and the soil will be dry some days before it will be in the open field.

In one corner, on the south border, the hot-bed may be made, as it is not yet too late to raise a supply of plants to set out in the open air; but it should be done the very first of this month. A single hot-bed of four lights, can be made to raise a superabundance of Cabbage, Tomato, Pepper, Eggplant and Sweet Potatoe plants, to supply the wants of the largest family, and a few choice annuals for the flower garden besides.

Digging the borders, &c. may be proceeded with, and the walks or paths shaped out at the same time; though permanent walks, covered with gravel or cinders, are much more pleasant and desirable. If the soil does not crumble fine and mellow, under the spade, it may be thrown up as rough as possible, and a few days of drying March winds, will evaporate the moisture, and it will readily crumble before the rake or drag fork.

When this is the case, the first sowings may be made. A couple or three rows of Peas, forty feet long, of the earliest variety, and a rod or two of Potatoes, will do to commence with, both to be on the forwardest spots. And soon after may be sown on the south border, which should be thrown up high for the purpose, small squares of Radish, the Early Short Top, or Red and White Turnip—Lettuce, the Early Curled or Silesian—Beets, the Early Turnip—Spinach, the round Savoy Leaved; and Carrot, the Early Horn. All these are to be small sowings, say $\frac{1}{2}$ a rod of each just for earliest use, to be followed by other sowings when the weather and soil get more congenial. A little risk may be run, for the sake of the chances of an early season, and if it should happen to fail, it is only the loss of a little seed and labor, which may be repeated again.

But for the main crops, it is best to wait till the soil becomes somewhat warm and dry, and in a generally favorable condition for the germination of seeds. If spring Turnips are wanted, they should be sown early, as they soon become

"sticky" or "stringy" after the weather gets warm. Onions, also, if raised from the seed, being hardy, should be sown quite early, and be well thinned out, and kept well cultivated, so as to grow the bulb as large as possible before the hot weather sets in, which soon dries the tops off.

We will suppose that you have a new garden, prepared somewhat after the directions given by us last month, and that you have the permanent crops to plant yet—Asparagus, Rhubarb, the Small Fruits, Dwarf Pears, &c. The present is the proper month to plant all these, and we would urge, instead of sticking them along the edges of the walks, or scattering them all over the garden, that they be all planted in separate squares, or compartments, especially devoted to them; or if your garden is worked by the plow, a road or turn-row eight or ten feet wide may run down the middle, and the rows run from it to the outside each way. Then one side may be devoted to the above crops as far as wanted, and the other to the annual crops.

With most farmers, the plow and cultivator will be required to do most of the work, and we shall give directions for planting accordingly.—Asparagus may be planted in single rows, four feet apart, plants twelve inches apart, and if well cultivated the crowns will spread and make wide rows, and the work may nearly all be done with the plow, except just along the rows, where the hoe and fork must do the work. As many rows may be planted as are desired, but say six rows, fifty feet long, for a large family, taking three hundred plants. Next may come two rows of Rhubarb, planted four feet apart each way, requiring about two dozen plants. This will be ample for a supply. It can be easily and cheaply cultivated. Then may come the Strawberries, in rows three feet apart, plants two feet apart in the rows, say eight rows, making two hundred plants. Then three or four rows of Currants, five feet apart, four feet apart in the rows, taking from forty to fifty plants. Next a couple rows of Houghton Gooseberry plants, not less than six feet apart, plants four to five feet apart in the row. Then, say half a dozen rows of Raspberries, planted four by four feet apart, requiring about six dozen plants; and you have a supply of small fruits that would prove a blessing to any family enjoying them.

No better place could now be found for the Dwarf Trees, than a continuance of the same system of rows; and their being all together in succession, will greatly facilitate their cultivation, and they will be less likely to be neglected, as every time the cultivator or plow begins on them during summer it can be run through the whole of them at once.

Dwarf Apples, Pears, and Cherries, may be planted in rows eight to ten feet apart, and the same distance in the rows, and as many, of course, as taste or faith dictates. The whole may be completed by a few rows of Grapes, planted in the same manner, rows six feet apart, plants four feet apart in the rows, and a trellis run along each row, or stakes, whichever are most convenient or accessible.

[Written for the Valley Farmer.]
Calendar of Operations in the Vineyard.

BY GEORGE HUSMANN.
 MARCH.

This will be a busy month in the vineyard. We will suppose your pruning all finished, as it ought to be; and, also, if you want to plant—the ground prepared and ready. This, then, is the time to plant. First, get good plants, and plant none but such as are good. One year old plants from cuttings, or good layers, well supplied with sound, healthy roots, is what you want; better wait another year, than plant poor plants.

If your ground is well prepared and pulverized, lay it off for planting with a line, and put down a stick, sixteen to eighteen inches long, where each vine is to be. Plant Catawba, 6 by 6, or 4 by 8; Norton's Virginia, 6 by 7; and Concord and Herbemont, 6 by 8 feet apart. Make a bed for your plant, digging from the stick in a slanting direction towards the hillside, about 8 to 10 inches deep. Then take your plant, cut the young growth back to one eye, shorten in the roots to three inches, with a sharp knife, cutting off all bruised and decayed roots; lay it on the slanting bed prepared, spread the roots well, and then fill in around them with well pulverized leafmold. Let the top of the plant be even with the ground, and come out at the stake. Look to planting your rows straight, it will be much easier to work your vines with plow and cultivator, if they are all in a line. Do all this in good weather, the ground being dry enough to work well. If it is not, better wait till next month, than plant them in wet soil. Have the roots of your plants moist, while planting either puddle them or keep a wet rag around them until you use them.

If your hillside is steep, you should leave space every sixth or eighth row for a surface drain, to keep the ground from washing. Much may also be done to prevent this, by plowing between the rows, leaving a furrow in the middle of each row.

If you have any vacant spaces in your old vineyards, make layers from neighboring vines to fill them. Dig a trench from the vine to the empty place, about 8 to 10 inches deep, and bend one of the canes, left long for that purpose, into it. Let it come out one eye above the ground, at the place where the vine is to be, and fill up with good, light soil. It will strike root at every point, and make a strong plant. Next spring, it may be cut half through, close to the parent vine, and the second spring, it can be cut off altogether. As it takes much nourishment from the parent vine, that must not be pruned too long, or it will get exhausted.

Towards the latter end of the month, tying to the trellis should be done, before the buds swell. Tie your cane to one side of the trellis, with a good willow band, tying it firmly to the lath; then bring it up to the second lath, if long enough, close to the post and bend it round towards the middle, thus forming a half bow, tying it firmly twice.

This is also the time for grafting old vines with new and valuable kinds, and to layer for

propagating. For the first, dig away the ground around the vine, until you come to a smooth place to insert your scion; then cut off the vine with a sharp knife, and insert one to two scions, according to the size of your vine; as in common cleft grafting, taking care to cut the wedge very long and thin, with shoulders on both sides, cutting your scion to two or three eyes. Take great care to insert the scion properly, as the inner bark or fiber is very thin on the vine, and the success of the operation depends upon a complete junction of it in the stock and scion. If the vine is strong, no further bandage is necessary, only press a little moist earth on the wound, and fill up carefully with well pulverized earth, leaving one eye of the scion above ground. Mulching with dry leaves or straw around the scion, is very beneficial.

For layering, make a bed of fine mold under your vines, then take canes of last year's growth, and fasten them on the bed with wooden hooks. They may be left thus, until next month, when they have sprouted, and then filled up around the shoots with fine earth.

Cuttings may also be put out in well pulverized soil. Lay them in a slanting position, in rows two feet apart, and one to two inches apart in the rows, leave one eye above ground, and press the ground down firmly to the lower end.

THE CONCORD AS A WINE GRAPE.

Hitherto, this grape was only considered valuable as a table and market fruit. I have, however, made also a very fine wine from it this season. The wine is light red, was perfectly clear, six weeks after it was made; is of splendid color, very mild, yet strong, and has a strong aromatic flavor which is very agreeable. It is, in my opinion, a better table wine than any I have yet tried, as most of our native wines are not so well adapted for that purpose, being too strong and heady. This will give a new impulse to the cultivation of this, one of our most valuable grapes. It is certainly the grape for everybody.

[Written for the Valley Farmer.]

Meramec Horticultural Society.

SCHOOL HOUSE, EUREKA, FEB. 7, 1861.

The twenty-sixth monthly meeting of the Meramec Horticultural Society was held as above, Dr. Morse, President, in the chair.

The minutes of the former meeting were read and approved.

Three varieties of potatoes, and one of apples, were presented by Mr. L. D. Votaw.

The Secretary read a communication from the Agricultural Bureau of the Patent Office, requesting statistics of St. Louis County and this Society. The questions contained in the circular and the answers were read, when, on motion, of Dr. A. W. McPherson it was

RESOLVED, That the Secretary is hereby requested to finish the communication and give it to the Corresponding Secretary, who shall intimate the approval of the Society, and return them to the Bureau at Washington.

The Executive Committee reported as the subject for discussion at the next meeting, "Preparation for, and time of Planting the various Spring Crops."

The subject for discussion, "Grafting," was then taken up, whereupon the President was called upon to open the subject. He stated it was his opinion

the call was a little out of order, but to open the subject so as to get it before the meeting he would make a few remarks. The subject was very broad, and involved principles that were very deep, perhaps too much so for us. As to the manual part of the operation, little need be said upon that, it was generally so well understood. There were many points on which men of science in this department were not agreed, and in regard to which much careful observation and many and lengthened experiments would be required, as for instance, whether it was best to graft upon the young root, or upon the branches of older trees? Whether it was best to graft upon whole roots of one or two years of age, or upon pieces of these roots? Whether it made any difference to graft upon good pieces of lateral root, or upon tap root alone?

Again, it is still a question that might aid in our acquirement of very early varieties, to know how far the stock affected the scion and the scion the stock. It was a well known fact that the stock affects the scion in the Dwarf Pear very much, and this is more or less the case with other stocks used for dwarfing. He had grafted apple in two Service Berry trees last season, they as yet have done well, and as the Service Berry is an early plant, and ripens its fruit very early, it may hasten the ripening of the apple scion, when grafted upon it.

Again, raising seedlings from the seed of early apples, and grafting early apples on these stocks, might be found to have an influence in getting them still more early.

The getting scions from old varieties might be found an evil—it was held that trees had a definite, limited existence; some said fifty years some one hundred: as in grafting we perpetuate an individuality. To have healthy trees and perfect fruit we should see that trees from which we obtain the scions are not in their old age, and the seedlings from seed of trees in their youth. Maturity or old age may largely affect the growth of the young tree.

Dr. Beale said, that the stock seemed to exert a great influence upon the future growth and thriftiness of the tree. He grafted twenty trees last season with scions from Pryor's Red, some on the different pieces of root from the crown to the end. Whether the seedlings were so very different in their degrees of vital power, or whether there was a difference in the portion of the root as crown, middle, or lower portion, he could not say; but this he did know, that some of the trees in the same soil, and with the same treatment, grew three times as large and thrifty as some of the others.

Mr. Votaw said, that when he was young, he remembered very distinctly, that in conversations about grafting between his father and the Messrs. Sappington, who grew trees at that time more largely than any other party in the county, they held that there was a difference in the quality of the fruit where the scions of sour apples were grafted upon sweet stocks, and the reverse; and that to have both classes of fruit in perfection, the two classes of fruit should be grafted on the same class of seedling stocks.

Dr. Beale had frequently grafted peaches and plums, always on the whole root, and they nearly all took well. He did not think, however, that they made so strong or rapid a growth as those budded the previous fall.

The Secretary said, it was his opinion that the change in the quality of some pears upon being dwarfed, arose more from a semi-mechanical cause than from any positive influence the stock exerted upon the scion. In the dwarf pear the quince stock was much slower in its growth than the pear; the sap could not be so rapidly returned to the roots; and this check in the circulation of the sap tended to produce fruit buds instead of leaf buds, and the sap by being checked in its flow, was better elaborated in the leaves and tended to produce a richer fruit in those varieties whose habits accorded with or required this restraint. As to early stocks, he did not understand

how the earliness of the stock could influence the scion, as the physiology of vegetation showed that it was from the descending sap, after it had undergone elaboration in the leaves, that the buds and roots were developed; the foliation and florescence of plants depended more upon atmospheric than subterranean conditions.

In regard to grafting upon tap or lateral roots, he had tried both last season, and the lateral grafts dried out, while the taps all did well. Always prefers whole roots, with as large a proportion of the side roots as possible; would fully test the relative value of whole roots, pieces, and laterals, by keeping them apart and trying different varieties upon the different portions, and keep a correct record.

He then referred at some length to grafting the vine, and referred to some very successful experiments undertaken by some gentlemen, near the city, upon a new mode of root grafting.

Mr. Allen thought it of considerable importance to know if the lateral roots of old trees would do to graft upon, as it was possible that some might have plenty of lateral roots on old trees, who had no seedling roots.

Dr. McPherson said that, in regard to lateral roots, some two years since he conversed with Mr. Richter on this very subject, and Mr. R. told him he saved all the lateral roots of the trees he took up from the nursery and grafted upon them. It was only the second season he had raised seedlings to graft on, and liked them better, and that they did well there. We have had evidence all around us for the last fifteen years, but it is probable they will not make as lasting trees as from young roots.

Mr. Allen thought that these differences should be tested by well conducted and distinctly recorded experiments—if not for our benefit, for the benefit of our children. Had this been done by our fathers, it would have been of great value to us.

Dr. McPherson stated, that he had visited Mr. Baxter, one of the most successful fruit raisers in the vicinity, and a perfectly reliable person in all his statements, some years since, when the White Heath Peach was new in these parts. Mr. B. planted seven seeds of fine White Heath peaches; of these four grew. One produced peaches like the original, but earlier; another, the largest and finest peach he had ever seen, with a very small pit, free, and yellow flesh; another, a freestone, like the White Heath. It is a large, fine peach, but a very shy bearer. It has some of these large and exquisite peaches, and at the same time has peaches of the same style and flavor, of all sizes, from a peach nut to this mammoth peach, all at once on the same tree. It may change as the tree grows older, but is a curiosity just now.

It was then announced that the next meeting be held at the School House, Allenton, on Thursday, the 7th of March, at 10 A.M. and be a basket meeting.

On motion the meeting adjourned.

WM. MUIR, Sec.

EVERGREENS—WHEN TO PLANT.—One of our readers asks us when is the best time for planting Evergreens, and why so many die after planting? Our answer is, that evergreens can be safely transplanted during any of the spring months. They are as certain to live as an apple tree if planted properly. We plant them by the thousand every spring, and rarely ever lose one. The reason why so many die is, that the roots are allowed to become dry before being planted. If the roots are kept moist they are as certain to live as any other tree. But if the roots are allowed to get dry, you need not plant them expecting them to live.

[Written for the Valley Farmer.]

Missouri State Fruit Growers' Association.

The second annual meeting of the State Fruit Growers' Association was held in St. Louis, commencing Jan. 8th, 1861, Norman J. Colman the President in the chair.

In opening the business of the session, the President said that personal indisposition, aggravated by the effect produced by the information just received of the death of a near relative, incapacitated him from indulging in any lengthy remarks.

There is one thing, however, which is the cause of sincere congratulation in regard to our present meeting: It is that, while our entire country is plunged into the most unparalleled difficulties, every interest suffering to the utmost; commercial and financial distress surrounding us on every side, and threatened with political difficulties of the greatest magnitude:—yet cultivators of the soil are less affected by these troubles than any other class, and we should feel profoundly thankful that we can thus calmly assemble and discuss these matters, with the certainty of "Seed-time and harvest," and with the full conviction that, notwithstanding these troubles, the soil shall still yield its rich returns to a hungry world, and wheat and corn and fruit and wine shall be still as much demanded and can be as fully supplied as ever. Truly, the reward of the laborer is with him.

The President introduced Mr. Jonathan Huggins, of Woodburn, Illinois, as Delegate from the Illinois State Horticultural Society. A letter was read from Dr. Warder, of Cincinnati, inviting the members to meet with the Cincinnati Horticulturists at their annual meeting.

A statement of the views of the St. Louis Vine and Fruit Growers' Association was laid before the meeting by their Secretary.

Several varieties of Winter Apples were presented by Messrs Husmann and Manwaring, Hermann—Michael Henry Pippin, Lemon Pippin, Rawle's Janet, Campfield, Red Russet, Limber Twig, Red Winter Seedling, and another fine seedling not named. By Mr. Pettingill of Bunker Hill, Ill.—Winesap, Newton Pippin, Baldwin, Vandevere, Blood Pippin, Cooper Russet. Also, varieties from Mr. Poeschel, Hermann; Mr. H. T. Mudd, St. Louis Co., and from the President. Sample bunches of the Catawba and Herbermont Grape, by Mr. F. Noe, Hermann, in a most excellent state of preservation. Samples of Dried Peaches and Apples, and Catawba Grape Jam, and Cuttings of the Catawba, Isabella, Northern Muscadine, and Chassales de Fontainebleau, by St. Louis Vine and Fruit Growers' Association through their Secretary, Chas. H. Haven. Samples of Wines from Husmann and Manwaring, Hermann—Catawba, Norton, Herbermont, Cunningham, Missouri, Husmann's Prolific, Native Frost, and Native Summer; all of 1860. From Mr. Poeschel, Hermann—Catawba and Norton, 1860. From J. Haundhausen, Herman—Catawba, 1860, and Herbermont, 1859. From M. Wuthrich, Hermann—Catawba, Herbermont, and Norton, 1860. From F. Noe, Hermann—Catawba, Norton, Herbermont, Cunningham, Riesling, 1860. From F. Langendorfer, Hermann—Norton, 1860. From Jacob Rommel, Catawba and Norton, of '59, and '60.—From Nicholas Grein, Hermann, Catawba, 1860.—From Louis Seitz, St. Louis, Catawba, 1860. From Dr. Bock, Waterloo, Ill. samples from Illinois Grape. From Mr. Pettingill Bunker Hill, Ill. samples Red Currant Wine.

The business Committee recommended the discussion of the Small Fruits as the first business of the session, in the following order: Strawberries, Currants, Gooseberries, Raspberries, Blackberries; and that the continuance of the Grape be resumed from the last annual meeting; and that the same order be observed in the discussion as at the last annual meeting, viz:—Best location, time and manner of planting, pruning

and subsequent cultivation, diseases and remedies Adopted.

Nineteen new members were elected.

It was, on motion, **RESOLVED**, that a committee be appointed to draft By-Laws for the Association; adopted; and the Chairman appointed C. C. Manwaring, E. R. Mason, and H. T. Mudd. The Committee reported the following

BY-LAWS.

ARTICLE I.

SECTION 1. That the expenses of this Association shall be paid out of the Treasury; but in case of a deficiency in the Treasury, such deficit shall be made up by a **PRO RATA** assessment on the members of the Association.

SEC. 2. The annual fee of membership shall be promptly paid at the regular January meeting of the Association.

SEC. 3. It shall be the duty of the Secretary to forward to each member a copy of the annual report of the proceedings of this Association, and of the amount due by said member to the Association, and to open an account with each member.

SEC. 4. It shall be the duty of the Treasurer to make an exhibit of the financial condition of the Association at each annual meeting.

SEC. 5. That all motions and reports be handed to the Secretary in writing, with the names of the mover and seconder, or of the Committee Reporting.

ARTICLE II.

Order of Business.

1. Reports of Standing Committees.
2. Reports of Special Committees.
3. Unfinished Business.
4. Admission of New Members.
5. Communications and Correspondence.
6. Miscellaneous Business, including Election of Officers at the Annual Meeting.
7. Discussions in order presented by the Business Committee.

On motion, **RESOLVED**, that the report of the Committee on By-Laws be received and adopted by the Society. Adopted.

The President then directed the attention of the Association to a series of questions propounded by the American Pomological Convention, in regard to the Fruits best adapted to the several States. When it was, on motion,

RESOLVED, that a Committee of six be appointed to arrange the lists required, as far as time would permit.

Whereupon, the President appointed on said Committee: Geo. Husmann, Jas. Kelly, Carew Sanders, C. H. Haven, Dr. J. B. H. Beale, Julius Malinckrodt.

The Committee presented their report, which was received, slightly amended, and adopted.

REPORT

Of the Missouri State Fruit Growers' Association in answer to the questions proposed by the American Pomological Society:

APPLES.

Query? In an orchard of one hundred trees for family use, what six, what twelve, and what twenty varieties of apples, and how many trees of each variety can be recommended for cultivation in the State of Missouri.

Answer: As known to be adapted to the central and south-eastern portions of the State:

First—For 100 trees, the best six varieties for family use, are, Early Harvest, 8; Maiden's Blush, 12; Fall Queen, 15; Ortley, 15; Wine Sap, 25; Newton Pippin, 25.

Second—The best TWELVE varieties for family use, are, Early Harvest, 6; Red June, 4; Maiden's Blush, 10; Fall Queen, 8; Rambo, 6; Ortley, 10; Yellow Bell-flower, 6; Pryor's Red, 6; Newton Pippin, 13; Rawle's Janet (Jeneton), 13; Michael Henry Pippin, 6; Wine Sap, 12.

Third—The best TWENTY varieties for family use,

are, Early Harvest, 5; Red June, 3; Red Astrachan, 3; Sweet Bough, 2; Maiden's Blush, 7; Rambo, 5; Fall Queen, 6; Newtown Spitzenberg, 4; Fameuse, 4; Ortley, 6; Yellow Bellflower, 5; Michael Henry Pippin, 5; Pryor's Red, 5; Wine Sap, 8; Newtown Pippin, 8; Swaar, 3; Asopus Spitzenberg, 3; White Pippin, 5; Lemon Pippin (Long Green), 5; Rawle's Janet (Jeneton), 8.

Query? For an orchard of one thousand trees, what varieties, and how many of each, can be recommended for market purposes.

Answer: 100 Early Harvest; 50 Red June; 50 Red Astrachan; 50 Fall Queen; 75 Ortley; 100 Wine Sap; 125 Jeneton; 150 Newtown Pippin; 50 Little Romanite; 50 Michael Henry Pippin; 50 Pryor's Red; 50 Smith's Cider; 50 White Winter Pearmain; 50 Willow Twig.

On motion, RESOLVED, that the President appoint a Committee of Five to test the samples of Wine on the table and report. Adopted. Whereupon, the President appointed Mr. Wm. Glasgow, Jr. Dr. C. W. Spalding, Mr. Louis Wolfe, Mr. C. Quinette, Dr. L. D. Morse.

The Committee upon Wine report that they have examined over 12 samples of CATAWBA Wine, resulting as follows: One fine sample of vintage of '59 ruled out for want of competition. Of the rest of vintage of 1860—

Sample No. 20, Best; M. Poeschel, Hermann.

Sample No. 9, Second; M. Wutherich, Hermann.

HERMANN: four samples, one sample of the vintage of '59, very good; Julius Hunthouse, Hermann. The other three samples so nearly alike as to be almost impossible to decide—if any difference, it is in favor of No. 37, by Husmann and Manwaring, Hermann.

Two samples of Cunningham so totally different in their character that they could not be compared.

There were eight samples of NORTON: One sample of '59, No. 17—a most excellent article; Jacob Rommel, Hermann. Of the Vintage of 1860:—No. 19, Best; Michael Poeschel, Hermann. No. 21, Second, Jacob Rommel, Hermann. No. 1, Third; F. Langendorfer, Hermann.

The Committee remarked that in judging of Norton's Virginia Wine, there is a tendency in the mind to compare it with Catawba, which always led to erroneous results. There is no comparison between them, belonging, as they do, to two distinct classes, and as wines, can no more be compared than Port and Rhine Wine; all the samples were fair, and some of them of great excellence.

RIESLING, No. 4; F. Noe, Hermann; a superior wine.

Of four samples manufactured from the Wild Native Grape: No. 22, Summer Grape, Best; Husmann and Manwaring. No. 2, Waterloo, Second; Dr. Bock, Waterloo, Ill. No. 16, Frost Grape, Third; Husmann and Manwaring.

The wines were then freely partaken of by the audience at large, with feelings of evident satisfaction. A sample of Red Currant Wine, manufactured by Mr. Pettingill of Bunker Hill, Ill., was kindly opened by that gentleman and distributed among the audience, which prevented its being formally brought before the Wine Committee, and was pronounced by some of the gentlemen of the Committee an excellent article.

The election of Officers being in order, the President, Mr. Norman J. Colman, stated that for the past two years he had had the honor of acting as their presiding officer; that he now wished to retire from the office of President, and declined becoming a candidate for re-election. He thanked the members cordially for the honor they had bestowed upon him at former meetings by electing him to the highest office within their gift.

OFFICERS ELECTED.

PRESIDENT—Dr. C. W. Spalding, St. Louis.

VICE-PRESIDENTS—1st Cong. Dist., Dr. A. W. McPherson, Allenton; 2nd Cong. Dist., Prof. G. C. Swallow, Columbia, Boone Co.; 3d Cong. Dist., Gen. M. Horner; 4th Cong. Dist., W. L. Irvin, Buchanan

Co.; 5th Cong. Dist., Eldridge Burden, Lexington, Lafayette Co.; 6th Cong. Dist., Wm. C. Price, Green Co.; 7th Cong. Dist., W. S. Jewett, Poevely, Jefferson County.

RECORDING SECRETARY AND TREASURER—William Muir, Laborville, Melrose P. O., St. Louis, Co.

CORRESPONDING SECRETARY—Dr. L. D. Morse, Allenton, St. Louis County.

At the close of the proceedings of the first day, it was, on motion,

RESOLVED, that the thanks of this Association be tendered, through the President, to Messrs. Bryant and Stratton, for the use of their College Rooms, and to inform these gentlemen that the Association will hereafter meet in the Supreme Court Room, in the Court House. Adopted. The meetings were thereafter held in the Supreme Court Room.

P. S.—The Secretary has taken the liberty to alter the order of the Business SLIGHTLY, in order to have some portions of special importance, brought as early as possible before the members and the public generally. W. M.

[The above report only relates to the business proceedings of the Association. The discussions will be published hereafter.—EDS. VALLEY FARMER.]

The Apiary.

HINTS FOR THE MONTH.

BY J. W. QUINBY.

BEES IN-DOORS.

Set out on the first warm, clear, still day; any time between 9 A. M. and 3 P. M. will answer. A light snow is fatal, but old snow with a crust will do no harm. Set but few out at once, and the hives as far apart as possible to prevent mixing up. A dozen or so every two hours, in a yard of ordinary size, would do very well. When possible let each hive occupy the same stand it did last year. Experience confirms this practice, and from this fact, though the average life of a honey bee in the summer season is not more than four or five months at most, it is probably true that some of them live through the entire winter. Should they mix up badly, as they will sometimes, even with good care, some stocks thus becoming very strong in numbers while others grow weak in proportion, it is a good plan to change the relative positions of the strong and weak stocks the day after; that is, set the weak ones where the strong ones stood, and VICE VERSA. In such cases there will not be much fighting. It will be necessary to keep the room from which you are bringing them dark as possible, but with every precaution the bees will be quite uneasy. A little tobacco burned in the room will help keep them quiet. Snow or ice thrown in will contribute to the same end.

BEES OUT-DOORS.

If properly ventilated, stocks wintered in the open air need not be disturbed until the snow and ice melt away from around them. Then cleanse the stands thoroughly. A good way is to take a clean new stand and substitute it for the old one under the first hive you come to. Clean this and in the same manner substitute it for the old one under the next hive, and so on till the work is done.

CONDITION OF HIVES.

After the bees have been warmed up in the spring and exercised for a day or two, examine each stock to ascertain its condition. Sometimes clusters of dead bees will be found between the combs. Such, having been too far removed from the centre of animal heat, have probably frozen, and should be immediately removed so that they may not injure the combs by dampness or putrefaction. But if the combs are already moldy, break them out so far as affected. Sometimes the queen is lost during the winter. If a

stock has lost its queen, of course it will have no brood, and this is the surest indication of such loss. But in such a case there will generally be a commotion among the bees on the evening after setting them out in the spring for the first time. Those that have been out all winter would probably fail to indicate it in this way. A swarm without a queen is very apt to desert its hive and go to some other on the first opportunity, and therefore should be attended to at once. Either transfer the bees to some weak stock with a queen, or, if the number is large and honey abundant, unite some weak swarm with it. Directions for uniting swarms were given in October. When a hive is deserted in the manner mentioned, or when a swarm is taken out and united with some other, the remaining combs, if clean and bright, should be left, and the hive saved to receive a new swarm. But as the combs in such a case have been kept warm all winter by the bees among them, it will be necessary to smoke them with sulphur at two or three different times, to destroy the worms as they hatch. If this is neglected it will damage bees more to put them in such a hive than it will benefit them.

See also in early spring that each hive contains sufficient honey. If the season be wet and backward, as much may be required from March till June as was consumed during the entire winter. It is best to feed honey, though syrup of sugar or candy will do. Do not feed before it is necessary, however, because it will stimulate pillaging propensities. Besides, feeding will induce more extensive breeding, which will require more honey, and unless a regular supply should be kept up the bees might suddenly starve. It is said that feeding unbolted rye meal in the spring is followed by good results. The bees will store it up industriously. It may be fed by putting a few quarts at a time into a shallow box several feet square with sides high enough to prevent the meal from being worked off at the edges. Unbolted meal seems to be carried by the bees more readily than fine flour.

St. JOHNSTOWN, 1861.

Domestic Department.

A SURE REMEDY FOR A FELON.—This very painful eruption, with all the "remedies recommended," is seldom arrested until it has run a certain course after causing great suffering for two or three days and nights. The following remedy is vouched for by the "Buffalo Advocate," as a certain thing from its own knowledge: Take a pint of common soap, and stir in air-slacked lime, till it is of the consistency of glazier's putty. Make a leather tumbler, fill it with this composition, and insert the finger therein, and a cure is certain." This is a domestic application that every housekeeper can apply promptly.

ONE HUNDRED POUNDS OF GOOD SOAP FOR \$1.30.—Take 6 lbs. of potash, 75 cents; 4 lbs. of lard, 50 cents; quarter of a pound of rosin, 5 cents. Beat up the rosin, mix all together well, and set aside for five days; then put the whole into a ten gallon cask of warm water, and stir twice a day for ten days, at the expiration of which time you will have 100 lbs. of excellent soap.

LEMON PIE.—Take two quart bowls; in one squeeze three lemons and extract the seeds. In the other beat three eggs, with three teacups of sugar, grate in some nutmeg, and set them aside. After mixing the crust—which I do with half a pound of lard to rather more than a pint of water, sometimes rolling it out and spreading on it a quarter of a pound of butter, at other times omitting most of the butter—put the under crust on two plates; then mix the contents of the two bowls, pour it on the crust, cover them with the top crust, and bake immediately, as the lemon juice and egg soon harden together.

If a more simple pie, add a teacupful of boiled corn starch. No milk.

SALLY LUNN.—I am tempted to send my recipe for this most delicious tea bread, which once eaten at your table will cause your friends to rejoice when asked to come again.

Take a stone pot, pour in one pint bowl of sweet milk, half a teacup of baker's or other yeast, one-quarter of a pound of melted butter, a little salt, and three beaten eggs. Mix in about three pint bowls of flour. Let it stand several hours, or until quite light; then put into Turk heads or other tin pans, in which Sally should again rise up before being shoved into the oven, to be "brought out" and presented to your friends as the beauty and belle of the evening.—[Cor. Country Gentleman.

LITTLE PLUM CAKES TO KEEP LONG.—Dry one pound of flour, and mix with six ounces of finely powdered sugar; beat six ounces of butter to a cream, and add to three eggs well beaten half a pound of currants washed and nicely dried, and the flour and sugar; beat all for sometime, then dredge flour on tin plates, and drop the batter on them the size of a walnut. If properly mixed it will be a stiff paste. Bake in a brisk oven.

QUEEN CAKE.—Mix one pound of dried flour, the same of sifted sugar and washed currants; wash one pound of butter in rose-water, beat it well, then mix with eight eggs, yolks and whites beaten separately, and put in the dry ingredients by degrees; beat the whole an hour; butter little tins, teacups, or saucers, filling them only half full; sift a little fine sugar over, just as you put them into the oven.

SEED CAKE.—Beat one pound of butter to a cream, adding gradually a quarter of a pound of sifted sugar, beating both together; have ready the yolks of eighteen eggs, and the whites of ten beaten separately; mix in the whites first, and then the yolks, and beat the whole for ten minutes; add two grated nutmegs, one pound and a half of flour, and mix them gradually with the other ingredients; when the oven is ready, beat in three ounces of picked caraway seeds.

LEMON CAKE.—Beat six eggs, the yolks and whites separately, till in a solid froth; add to the yolks the grated rind of a fine lemon and six ounces of sugar dried and sifted; beat this quarter of an hour; shake in with the left hand six ounces of dried flour; then add the whites of the eggs and the juice of the lemon; when these are well beaten in, put it immediately into tins, and bake it about an hour in a moderately hot oven.

PARISIAN MODE OF ROASTING APPLES.—Select the largest apples; scoop out the core without cutting quite through; fill the hollow with butter and fine, soft sugar; let them roast in a slow oven and serve up with syrup.

WHAT CAUSES HAIR TO TURN GREY.—An English writer has recently asserted that an undue proportion of lime in the system is the cause of grey hair, and advises all to avoid hard water, either for drinking pure, or when converted into tea, coffee, or soup, because hard water is always strongly impregnated with lime.

Hard water may be softened by boiling it: let it become cold, and then use it as a beverage. It is also stated that a liquid that will color the human hair black, and not stain the skin, may be made by taking one part of bay rum, three parts olive oil, and one part of good brandy, by measure. The hair must be washed with the mixture every morning, and in a short time the use of it will make the hair a beautiful black, without injuring it in the least. The articles must be of the best quality, mixed in a bottle, and always shaken well before applied.

GINGER CRACKERS.—One pint of molasses, one cup of butter, one cup of sugar; one tablespoonful each of ginger, allspice, cinnamon and cloves; flour to roll out thin; bake quick.



THE TEETH.

Two things are indispensable: First, from the age of four years, until marriage, have a good dentist to examine every tooth most minutely, several times a year; second, begin quite as early to impress the child with the importance of keeping the teeth clean, and how best to do it.

A child has ten teeth in each jaw; all these, and these only, are shed; generally, in healthy children, two teeth are shown at eight months, at least eight in fourteen months, and the whole twenty at two and a half years.

From five to six years of age the first permanent teeth appear; and from that time the frequent and vigilant services of a sharp-sighted dentist ought to be secured. The eye-teeth appear between the eleventh and twelfth year; at fourteen the large double teeth present themselves, and the wisdom teeth at about twenty.

Hot and cold drinks should be avoided, particularly at the same meal.

The teeth should not be washed in cold water, especially after eating, because it and the warm or hot food is too striking, and chills them.

Each person should have two tooth-brushes, one moderately stiff, to be employed the first thing in the morning; the other (which may be a morning one which has been used for some time) should be softer, and should not be used in rubbing across the teeth much, lest it might cause the gums to recede, and thus pave the way for their falling out, but should be twisted up and down, so that each bristle may act as toothpick, to dislodge any particles between the teeth.

These softer brushes should be used immediately after each meal, taking care, at the end of the operation, to pass the brush across the back part of the tongue, and then gargle the throat and mouth well with water.

For cleansing the teeth and mouth, warm water, always at hand in cities, should be used, but never employ water so hot or cold as to cause uncomfortableness to the teeth, for they will soon be destroyed thereby. When it is very inconvenient to have warm water, hold the cold water in the back part of the mouth, keeping it from the teeth with the tongue, as much as possible, until it is warmer, and then use the brush.

It is frequently advised to clean the teeth the last thing at night; a much better plan is to do it the first thing after supper, and then they are in a clean condition for four or five hours longer out of twenty-four, while the trouble of cleaning

the teeth a second time would prevent eating anything later than supper.

The tooth-brush should be always used leisurely, for a slip or inadvertence may scale or break off a valuable tooth. Once or twice a week, the first or last brushing should be with pure white soap, thus: Wet the brush, and draw it several times across the soap, then put it in the mouth, rubbing the teeth until the mouth is full of foam, and for a minute or two employ the brush on the side of the teeth next the tongue, above and below, for it is there that tartar collects, to the eating away of the gums, and eventual falling out of the teeth. In most cases this tartar is deposited by a living creature, which is instantly destroyed by soap-suds, when tobacco-juice and the strongest acids have no effect.—[Dr. Hall.

WHAT MAKES A MAN.—A man never knows what he is capable of until he has tried his powers. There seems to be no bounds to human capacity. Insight, energy, and will, produce astonishing results. How often modest talent, driven by circumstances to undertake some formidable work, has felt its own untried and hitherto unconscious power rising up to grapple and to master, and afterwards stood amazed at its own unexpected success.

Those circumstances, those people, enemies, and friends, that provoke us to any noble undertaking, are our greatest benefactors. Opposition and persecution do more for a man than any seemingly good fortune. The sneers of critics develop the latent fire of the young poet. The anathemas of the angry Church inflame the zeal of the reformer. Tyranny, threats, fagots, torture, raise up heroes and martyrs, who might otherwise have slept away slothful and thoughtless lives, never dreaming what splendid acts and words lay buried in their bosoms. And who knows but the wrongs of society are permitted, because of the fine gold which is beaten out of the crude ore of humanity?

Here is the truth worth considering. Are you in poverty? Have you suffered wrong? Do circumstances oppose you? Are you beset by enemies? Now is your time. Never lie there depressed and melancholy. Spend no more time in idle whining. Up like a lion! Make no complaint; but if difficulty fight you, roar your defiance. You are at school, this is your necessary discipline; poverty and pain are your masters—use the powers God has given, and you shall be master at last. Fear of failure at first is a discipline. Accept the lessons; trust the grand result; up and up again; strike and strike again, and you shall always gain, whatever the fortune of to-day's or to-morrow's battle.

METEORIC.—Prof. Bartlett, of the Military Academy at West Point, thus states a theory of meteoric phenomena which we believe is in accordance with the views of some of the most distinguished scientists, including Humboldt:

These bodies are of the nature of planets, and circulate about the sun in orbits as unerringly as their larger brethren. When they and the earth come simultaneously to these points of their orbits which are nearest together, the ac-

tion of the earth often becomes superior to that of the sun, and the small masses are drawn to its surface. Plunging with enormous velocity into our atmosphere, these little bodies compress the air in front and rub against it with such violence on the sides, as to produce heat enough to fuse, and light sufficient to illuminate the most refractory and darkest of substances. The exterior and molten crust is swept to the rear by the resisting air; a new surface becomes exposed; this, in its turn is fused and carried backward, and so on till finally the whole track of the meteor is strewn with groups of disintegrated and scintillating material.

EARLY BREAKFAST.

Breakfast should be eaten in the morning, before leaving the house for exercise or labor of any description; those who do it will be able to perform more work, and with greater comfort and alacrity, than those who work an hour or two before breakfast. Besides this the average duration of the life of those who take breakfast before exercise or work, will be a number of years greater than those who do otherwise. Most persons begin to feel weak after having been engaged five or six hours in their ordinary avocations; a good meal re-invigorates; but from the last meal of the day until next morning, there is an interval of some twelve hours: hence the body in a sense is weak, and in proportion can not resist deleterious agencies, whether of the fierce cold of mid-winter, or of the poisonous miasm which rests upon the surface of the earth, wherever the sun shines on a blade of vegetation or a heap of offal. This miasm is more solid, more concentrated, and hence more malignant, about sunrise and sunset, than at any other hour of the twenty four, because the cold of the night condenses it, and it is on the first few inches above the soil in its most solid form; but as the sun rises, it warms and expands, and ascends to a point high enough to be breathed, and being taken into the lungs with the air, and swallowed with the saliva into the stomach, all weak and empty as it is, it is greedily drank in, thrown immediately into the circulation of the blood, and carried directly to every part of the body, depositing its poisonous influences at the very fountain-head of life. When in Cuba many years ago, we observed that the favorite time for travel was midnight; and the old merchants of Charleston may remember that when deadly fevers prevailed in hot weather, they dared not ride into town in the cool of the evening, but mid-day was accounted the safest. We know, from many years' living in New Orleans, that it was when the evenings and mornings were unusually cool, balmy, and delightful, the citizens prepared themselves for still greater ravages of the deadly epidemic for the first few days following.

If early breakfast were taken in regions where chill and fever, and fever and ague prevail, and if in addition a brisk fire were kindled in the family room for the hours including sunset and sunrise, these troublesome maladies would diminish in any one year, not ten-fold, but a thousand

fold, because the heat of the fire would rarefy the miasmatic air instantly, and send it above the breathing point. But it is troublesome to be building fires night and morning all summer, and not one in a thousand who reads this will put the suggestion into practice, it being so "troublesome," requiring no effort to shiver and shake by the hour, daily, for weeks and months together; such is the stupidity of the animal man!—[*Hall's Journal of Health.*]

TABLE MANNERS.—To meet at the breakfast table, father, mother, children, all well, ought to be a happiness to any heart; it should be a source of humble gratitude, and should wake up the warmest feelings of our nature. Shame upon the contemptible and low-bred cur, whether parent or child, that can ever come to the breakfast-table, where all the family have met in health, only to frown and whine, and growl, and fret! it is *prima facie* evidence of a mean, and groveling, and selfish, and degraded nature, whencesoever the churl may have sprung. Nor is it less reprehensible to make such exhibitions at the tea-table; for before the morning comes, some of the little circle may be stricken with some deadly disease, to gather around that table not again forever. Children in good health, if left to themselves at the table, become, after a few mouthfuls, garrulous and noisy; but if within at all reasonable or bearable bounds, it is better to let them alone; they eat less, because they do not eat so rapidly as if compelled to keep silent, while the very exhilaration of spirits quickens the circulation of the vital fluids, and energizes digestion and assimilation. The extremes of society curiously meet, in this regard. The tables of the rich and the nobles of England are models of mirth, wit, and bonhomie; it takes hours to get through a repast, and they live long. If anybody will look in upon the negroes of a well-to-do family in Kentucky, while at their meals, they cannot but be impressed with the perfect abandon of jabber, cackinnation, and mirth; it seems as if they could talk all day, and they live long. It follows, then, that at the family-table all should meet, and do it habitually to make a common interchange of high-bred courtesies, of warm affections, of cheering mirthfulness, and that generosity of nature which lifts us above the brutes which perish, promotive as these things are of good digestion, high health, and a long life.—[*Hall's Journal of Health.*]

A SISTER'S LOVE.—There is no purer feeling kindled upon the altar of human affection, than a sister's pure uncontaminated love for her brother. It is unlike all other affection; so disconnected with selfish sensuality; so feminine in its development, so dignified, and yet withal so fond, so devoted. Nothing can altar it, nothing can suppress it. The world may revolve, and its revolution effect changes in the fortunes, in the character and in the disposition of her brother; yet if he wants, whose hand will so readily stretch out to supply him as a sister's? And if his character is maligned, whose voice

will so readily swell in his advocacy? Next to a mother's unquenchable love, a sister's is pre-eminent. It rests so exclusively on the tie of consanguinity for its sustenance; it is so wholly divested of passion, and springs from such a deep recess in the human bosom, that when a sister once fondly and deeply regards her brother, that affection is blended with her existence, and the lamp that nourishes it expires only with that existence. In all the annals of crime, it is considered anomalous to find the hand of a sister raised in anger against her brother, or her heart nurturing the seeds of hatred, envy, or revenge, in regard to that brother.

HOW TO PROSPER IN BUSINESS.—In the first place make up your mind to accomplish whatever you undertake; decide upon some particular employment, and persevere in it. All difficulties are overcome by diligence and assiduity.

Be not afraid to work with your hands, and diligently, too. "A cat in gloves catches no mice." He who remains in the mill, grinds; not he who goes and comes.

Attend to your own business; never trust to any one else. "A pot that belongs to too many is ill-stirred and worse boiled."

Be frugal. "That which will not make a pot will make a pot-lid." "Save the pence and the pounds will take care of themselves."

Be abstemious. "Who dainties love shall beggars prove."

Rise early. "The sleepy fox catches no poultry."

"Plow deep, while sluggards sleep, and you will have corn to sell and to keep."

Treat everyone with respect and civility. "Every thing is gained, and nothing lost, by courtesy."

"Good manners insure success."

Never anticipate wealth from any other source than labor, especially never place dependence upon becoming the possessor of an inheritance. "He who waits for dead men's shoes may have to go a long time barefoot." "He who runs after a shadow, hath a wearisome race."

Above all things, never despair. God is where he was. "He helps those who truly trust in Him."

Some parents make the great mistake of keeping their children in-doors during cold weather. Such a practice is pernicious in many respects. It enfeebles the bodies of children, and renders them peculiarly liable to be attacked by colds and coughs. A child should have its feet well shod with socks and boots, its body well wrapped in warm clothing, its head and ears securely protected from the cold, and then be let loose to play in the keen, bracing, winter air. By this means its body will become robust, and its spirits be kept bright and cheerful; whereas, if a child be shut up in the house, it will become fretful and feverish, and perhaps wind up with a severe attack of illness. A warm dress, and plenty of play and fresh air, are infinitely to be preferred to hot rooms, cosettings, and a winding-sheet.

WORK AND THINK.

Hammer, tongs and anvil ringing,
Waking echoes all day long,
In a deep toned voice are singing
Thrifty Labor's iron song.
From a thousand fly wheels bounding,
From a thousand humming looms,
Night and day the notes are sounding
Through the misty fact'ry rooms.
Listen! workmen, to their playing—
There's advice in every clink:
Still they're singing—still they're saying—
"Whilst you labor, learn to THINK!"

Think what power lies within you,
For what triumphs ye are formed,
If, in aid of bone and sinew,
Hearts by emulation warmed,
Mighty though ye woo and cherish,
What shall hold your spirits down?
What shall make your high hopes perish?
Why shall ye mind Fortune's frown?
Do ye wish for profit, pleasure?
Thirst at Learning's fount to drink?
Crave ye honor, fame or treasure?
Ye the germs have—work and think!

Think! but not alone of living,
Like the horse from day to day;
Think! but not alone of giving
Health for pelf or soul for pay!
Think! Oh, be machines no longer—
Engines made of flesh and blood!
Think! 'twill make you fresher, stronger;
Link you to the great and good!
Thought exalts and lightens labor,
Thought forbids the soul to sink!
Self-respect and love for neighbor,
Mark the men who work—and think!

Think!—and let the thought new-nerve you—
Think of men who've gone before,
Leaving lustrous names to serve you;
Yours the path they've plodded o'er!
Freedom fights and wins her charter
With the sword of thought—the pen!
Tyranny can find no quarter
In the ranks of thinking men.
Think! for thought's a wand of power—
Power to make oppression shrink;
Grasp, ye then, the precious dower!
Poise it—wield it—work and think!

Hold your heads up, toiling brothers;
'Mongst us be it ne'er forgot,
Labor, for ourselves and others,
Is for man a noble lot;
Nobler far, and holier, higher,
Than vain luxury can claim,
If but zeal and worth inspire,
And true greatness be our aim.
Power to compass this is given—
Power that forms the strongest link
'Twixt an upright man and Heaven,
His noblest power—the power to THINK!

LORD ELDON.—It was the habit of Lord Eldon, when Attorney General, to close his speeches with some remarks justifying his own character. At the trial of Mr. Horne Tooke, speaking of his own reputation, he said: "It is the little inheritance I have to leave my children, and I will leave it unimpaired." Here he shed tears, and, to the astonishment of those present, Mitford, the Solicitor General, began to weep. "Just look at Mitford," said a by-stander to Horne Tooke. "What on earth is he crying for?" Tooke replied, "He is crying to think what a little inheritance Eldon's children are likely to get."

Editor's Table.

Premiums for Clubs of Subscribers to the Valley Farmer.

Four of the best and finest Sewing Machines are offered, as well as other valuable Premiums, and yet we regret to say there is but little effort made for them. They will be distributed among those who least expect them. All of this month can be employed in procuring subscribers. If any of our readers really wish one of these Premiums, they have but to put forth a little effort to get it. This is the last opportunity. You will not only get a fine Premium by the proper effort, but will be disseminating a valuable work. Reader, undertake to get one of these Premiums.

THE NEW AMERICAN ENCYCLOPEDIA.—This popular Dictionary of general knowledge continues to grow in number of volumes as well as interest. It is certainly the great indispensable work to every general library. It is the most reliable work of the kind we have ever examined. We hope the Publishers, Messrs. D. Appleton & Co. are reaping a rich reward in its publication, which is merited by the able manner in which the work has been prepared, and the highly creditable manner in which it has been published. Our country friends when visiting St. Louis, can examine the work by calling on Mr. C. C. Bailey, Bookseller, Main Street, who is the Agent for Missouri.

Send Us Names.

We have a good many numbers of the "Valley Farmer" for last year, which we would be glad to distribute as specimens among those who are not subscribers. Our friends would oblige us by sending the names and post-office addresses of those who they think would be interested in perusing the "Valley Farmer." We will in all cases send them specimen numbers.

AN APOLOGY.—We are receiving almost a score of letters of inquiry daily from our patrons. We always endeavor to answer these letters, but regret to say that in the press of business some of them have been overlooked. If any letters have not been answered, we hope our readers will consider that there are hundreds making similar inquiries, and that it is not always possible to answer these questions. However, we will endeavor to reply to all letters of inquiry that may be sent us.

A Liberal Offer.

We will furnish the "Valley Farmer" Free for all Premium Copies to any County Agricultural Society in the West, which will award the largest number of copies of it as premiums—no premium to be of more than one copy—but it may be offered in connection with other premiums. We hope the County Societies will take this matter in hand. All agricultural societies will be furnished with it at our very lowest club rates.

AGRICULTURAL SOCIETIES.—We are glad to see that the officers of agricultural societies are beginning to prepare their premium lists for the fall fairs. Let the best preparations be made—let the best premium lists be got up—and let us see a good sprinkling of the "Valley Farmer," as premiums, be offered. We really think it the best premium for the price that can be offered.

ADDITIONS TO CLUBS.—We have been asked by many, if they could send additional names at club rates, and at other post-offices. Certainly, gentlemen, we are always glad to receive such favors. Whenever you can procure a name, no matter where his post-office, send it to us and the club price, and we will thank you for all such favors. We want 10,000 subscribers yet, and hope the true friends of the "Valley Farmer" will get them.

THE HOME AND SCHOOL JOURNAL.—A neat monthly, of 32 pages, is edited by Prof. TRACY, and published by NORMAN J. COLMAN, at One Dollar per annum, or it and the "Valley Farmer" will be sent one year for \$1.50 per annum.

Missouri Agricultural Convention.

Pursuant to a call addressed to the different County Agricultural Societies, by the Meramec Horticultural Society, requesting them to send delegates to Jefferson City, to participate in a convention, the object of which is to request the Legislature to establish a "State Board of Agriculture." A large and enthusiastic number presented themselves.

The meeting organized temporarily in the morning at the Court House, by calling Dr. L. D. Morse to the Chair, and J. C. Watson to act as Secretary.

After an interesting discussion as to the best means of carrying out the objects of the meeting, the Convention adjourned to meet at the Hall of Representatives, at 7½ o'clock, P. M. When, on motion of Mr. Manwaring, the Hon. Charles Jones, of Franklin, was requested to act as Chairman of the meeting.

Mr. Jones explained the object of the meeting in a few very appropriate remarks.

Upon motion of Dr. Morse, the delegates appointed presented their credentials, and those who were not delegates, but felt a lively interest in the welfare of the State, and the progress of Agriculture, were invited to participate in the proceedings of the Convention.

Mr. Payne moved that the Secretary now read the resolutions which were presented by Gen. Minor in the morning, but subsequently amended by Mr. Muir, for the information of the Convention, which are as follows:

RESOLVED, That a committee of five be appointed by the President to draw up a law and present it to the Legislature, embracing the following views:

SECTION 1. The creation of a Board of Agriculture for our State, to be composed of two members from each of the five Agricultural Districts of the State, who shall elect a President, Vice-President and Secretary and Corresponding Secretary.

SEC. 2. This Board shall collect such information in regard to the culture of cereals, vines, fruits, stock, dairy and such other subjects, as shall in their opinion best advance and develop the resources of the soil of our State.

SEC. 3. They shall superintend and arrange the distribution of such seeds, flowers, fruits, &c., as may be placed in their possession.

SEC. 4. They shall annually publish a report embracing a detail of the statistics, facts, observations and suggestions that they shall have been able to obtain during the year.

Whereupon the President appointed the following gentlemen: Messrs. J. L. Minor, of Cole; C. C. Manwaring, of Gasconade; Wm. Muir, of Saint Louis; Hon. A. H. F. Payne of Clinton; Hon. P. B. Read, of Audrain.

When, upon motion of Mr. Cheathan, the President was added to the committee.

The following named gentlemen were recommended to the Legislature, from their respective districts, to compose the first State Board of Agriculture:

North-East District—Hon. P. B. Read, of Audrain, and Geo. D. Merriweather, of Lincoln; North-West District—Hon. A. H. F. Payne, of Clinton, and W. L. Irvin, of Buchanan; Central District—D. Hopkins, of Osage, and Richard Gentry, of Pettis; South-East District—Dr. L. D. Morse and Jno. Cross, of Cape Girardeau; South-West District—Hon. Marcus Boyd, of Greene, and Benjamin Wishon, of Phelps.

Dr. Payne remarked that the Board should have a President located in the centre of the State, and upon his motion Gen. J. L. Minor was also recommended to the Legislature as a suitable person for that position.

During the evening the Convention was addressed by Mr. Muir, Mr. Read, Mr. Manwaring, Dr. Morse, Mr. Payne and Hon. Mr. Lawson, all of whom were anxious and willing to use all honorable efforts to establish a State Board of Agriculture.

Upon motion of Mr. Payne, the proceedings were ordered to be published in the city papers and the VALLEY FARMER.

The Convention then adjourned.

CHARLES JONES, Pres.

J. CHRISTY WATSON, Sec'y.

THE CINCINNATUS AND JOURNAL OF AM. PATENT COMPANY.—Such is the title of a most interesting monthly of 48 pages, issued at Cincinnati, Ohio, at \$2 per annum, by the American Patent Company. The Horticultural Department is presided over by our friend, Dr. John A. Warder, the best pomologist in the United States, unless, perhaps, we except Chas. Downing. And we make this statement not un mindful that there are such eminent pomologists as P. Barry, Marshal A. Wilder, and others. The Scientific Department is ably edited. We wish this new enterprise the eminent success it deserves.

The old "SPIRIT OF THE TIMES" entered upon its Thirty-first volume on the 9th instant, inaugurating this evidence of its long life by an entire new dress of type and four additional pages to its heretofore large and attractive form. No paper in the country has, throughout its management, maintained a more thoroughly consistent course than this Journal. Notwithstanding the vicissitudes of politics and panics, it has pursued the even tenor of its way, turning neither to the right nor to the left, and the consequence is, that it maintains its popularity in every section of the Union, and this new evidence of its success we have already noticed is its just reward.

IMPEE SUGAR.—Col. Wm. Duane Wilson, Secretary of the Iowa Farmers' College, will accept our thanks for a sample of the premium sugar made from Impee in that State. It is of fair quality—undoubtedly from the Impee—and demonstrates that a good quality of sugar can be made in Iowa from that plant.

HEREFORD CATTLE,

HAMPSHIRE DOWN SHEEP,

BERKSHIRE HOGS,

OF PURE BLOOD,

For sale by JOHN MERRYMAN,

Hayfields, near Cockeysville,
Baltimore Co. Maryland.

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TREES.

The time for planting has arrived, and we desire to call the attention of the public to our unusually large and superior stock of APPLES, PEACHES, PEARs, CHERRIES, PLUMS, QUINCES, RASPBERRIES, STRAWBERRIES, BLACKBERRIES, RHUBARB, ASPARAGUS PLANTS, ORNAMENTAL AND SHADE TREES, EVERGREENS of all kinds, ROSES, GREENHOUSE PLANTS—in fine, everything kept in the largest and best Nurseries.

Western men will find it to their interest to call and examine our stock. Our trees are grown here in Missouri, accustomed to our climate and soil, and of such varieties as are suitable to our State. We are certain that trees raised in our own State are better for our own people than those coming from other States.

Those wishing to plant, can procure our Retail Catalogue, free, giving instructions for planting, pruning, cultivating, &c. by addressing letters to us.

Carew Sanders & Co.

ST. LOUIS NURSERY, ST. LOUIS, MO.

P.S.—A large and fine stock of CONCORD and other Fine Grapes on hand, very low.

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